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THE Cleveland Medical Gazette

NOVEMBER, 1900.

Original Articles.

SURGICAL TREATMENT OF TUBERCULOSIS OF LYMPHATIC GLANDS.*

BY CHARLES H. MERZ, A. M., M. D., SANDUSKY, OHIO.

Many of the peculiar features of inflammatory processes of the neck will be found to be dependent upon the anatomical structures of that region. With the wonderful advances that have been made in bacteriology, a new importance has attached to those diffuse ill-defined lymphatic or adenoid structures in their inherent and acquired capacity for the dissemination of tuberculosis, cancer, etc. It is a fact that is worthy of note that these structures which but too frequently prove to be the seat of the gravest inflammatory infectious processes have, until quite recently, been rather neglected by the anatomists. A careful examination of a large number of otherwise excellent works on anatomy impresses one with the idea that too little importance has been attached to a precise and intelligible description of the course of the channels which contribute lymph to each particular group of nodes.

When, upon examination, any individual lymph node at any one point is found invaded by a specific infectious substance a correct understanding of the anatomy of the lymphatic system will enable one to turn his attention at once to the particular region in which may be sought the cause of irritation or the source of toxic material. Even in an exhaustive work such as McClelland's Regional Anatomy we find the subject of the lymphatic glands of the neck passed over with rather meager descriptions, and these are included in the text descriptive of each particular organ.

*Presented at the Northern Ohio District Medical Society Meeting at Lorain, 26th July, 1900.

Any comprehensive description of the lymphatic system of the neck is entirely beyond the scope of this paper; however, it may be briefly stated that for convenience of description the lymphatic glands of the neck have been divided into the superficial and the deep. The superficial cervical lymphatics are situated in the course of the external jugular vein between the sterno-mastoid and platysma. They drain the hind part of the scalp, parietal, frontal and temporal regions, as well as the brow, inner half of the lids, the nose, upper and lower lip, chin and hyoid region—the outer surface of the cheek, parotid, mastoid, buccal and submaxillary regions.

The deep cervical lymphatics are divided into the upper-deep and lower-deep. They form a continuous chain along the sheath of the carotid artery and internal jugular vein, lying by the side of the pharynx, oesophagus and trachea. Practically, the upper deep cervical drain the deep muscles of the head, the intra-cranial structures, the pharynx, orbit, posterior and anterior nasal cavities, the upper jaw, roof of the mouth, tongue, tonsils, sublingual and submaxillary glands. The lower deep drain the internal maxillary group of nodes, the larynx and gullet, and empty into the mediastinal glands or nodes.

It is well to bear in mind, however, in making such an arbitrary topographical arrangement as this, that there are, at the margins of the peripheral areas, numerous lymphatic anastomoses with surrounding areas, the nodes of each group communicating frequently and that every region is connected in some manner with its neighbor.

Again, custom has sanctioned the division of diseases of the lymphatics into *idiopathic*, *traumatic* and *septic*. This division would seem not only unnecessary but incorrect. Our present knowledge of pathogenic germs, their origin, mode of life and their death, makes it reasonably certain that *whenever inflammation is dependent upon an injury it is septic* and that no inflammation of the lymphatic vessels occurs except by and through the direct agency of these germs. Though we may not be fully prepared to state what particular micro-organism has been instrumental in an individual case, nor to say how that micro-organism gained access to the tissue involved, whether through the mucous membrane, a wound or the unbroken skin, we *are* justified in relegating to obscurity the term *idiopathic* as being a meaningless adjective, when used in this connection. So also we may with propriety discard the term *diathetic* in its bearing on these inflammations, since

it is the absorption of an actual poison and its lodgment at the first convenient resting point that gives rise to inflammatory action. Traumatism is likewise rather limited as a casual agent since the inflammation of lymphatic nodes most frequently follows the receipt of an injury at some more or less remote point and is consequently not a direct cause *per se*.

A discussion of the symtomatology and pathology of the subject is not necessary at this time, a brief discussion of the general principles of treatment being all that is permissible. The question of greatest importance is whether an immediate incision should be made in these cases of glandular abscess or whether an attempt should be made to bring about resolution by means of local applications, hot or cold. At any rate, it may be safely said that hot applications, if made use of, should be antiseptic in character—the simpler and cleaner its employment, the better will be the results. Nothing can be suggested as more disgusting and dangerous than the packing of the wound with a sickening mass of warm linseed dough. A layer of absorbent cotton wrung out of hot carbolized water is the acme of sugical dressing when compared with a sour fermenting mass of linseed meal and pus.

Personally I have been in serious doubt many times as to which course would be the safest and most expedient. A few distressing delays have taught me that these abscesses may and can be opened when quite small, and then even if pus is *not* found after the first attempt, the incision through the skin and superficial fascia will relieve tension and add very materially to the patient's comfort and welfare.

Hilton-Roser's method is no doubt familiar to all and one that is particularly safe. The skin and fascia are incised by careful and easy strokes of the knife. A probe, or better, a grooved director may be then inserted and thrust about in various directions either by using some force or steadily rotating it. When the resistance is felt to cease and pus exudes, a pair of *closed* dressing forceps is thrust along the director, the blades opened and the forceps withdrawn. In this manner the pus is allowed free escape and subsequent drainage is facilitated. It is surprising to what a depth the probe may be entered in some cases, but search should be kept up until the pus or broken down material is found. It should be borne in mind that *fluctuation* is *always* a *late symptom* in all deep seated abscesses and may not be safely waited for.

These abscesses are not only the cause of great pain, but their contents are a positive menace to the entire economy, as by their

dissemination they may at any time induce a fatal result. After free evacuation, particularly if sinuses exist, the sharp or blunt spoon may be used with perfect safety and all granulations and broken down tissue should be freely scraped away. There is little or no danger of injuring large blood vessels as they are sufficiently protected by connective tissue.

In a number of the cases in which it was found desirable to curette, the instruments at command were all too large. Where the tissue to be removed is considerable or the granulations which line the sinus are slow to close up, in such cases as this, if the granulations are removed and moderate pressure applied along the line of the sinus, an early union of the walls may be expected. These sinuses are so small that often they will hardly admit a probe and a comparatively large opening would have to be made in order to remove the broken down tissue with an ordinary curette. For such cases I have made use of Wecker's steel eye spoon with sharp edge. By having it attached to a narrow flexible metallic handle about five inches long it is readily passed through an opening which will barely more than admit the probe. It is surprising how effective this little instrument will prove and the number of cases in which it will be found applicable. By means of it all dead tissue may be scraped out from the deeper foci and sinuses of considerable length. In order to still further aid nature and hasten the process of repair, each sinus may be threaded with a narrow strip iodoform gauze, allowing the gauze to protrude at either end and covering the inflamed area with absorbent cotton wet in warm carbolyzed solution. A piece of oil silk and a bandage will complete the dressing.

Some time since a case came under my care in which the first attending physician after poulticing most diligently for two weeks a swelling in the left parotid region, frankly confessed that he was, strictly speaking, "not in it," and advised that some one else be called. The advice was rather promptly accepted, and finally the case came under my observation. He had the accumulated benefit of the advice of four physicians and five weeks of poulticing. As his wife sadly reverted to his painful experience, she said that the poultice pan had not become cold a minute in all that time. I found a deplorable state of affairs. A large, brawny, hard swelling involved the temple, eye, cheek, jaw and neck—the jaw was fixed firmly—the teeth in apposition, the man suffered intense pain; had high fever and profuse sweats and was greatly exhausted. Though he said that it had been decided that no pus had

as yet been formed, it was my opinion that there was pus present, and furthermore that it was deep seated and burrowing. Under anaesthesia pus was found at the angle of the jaw at the depth of nearly two inches. This was evacuated by Hilton-Roser's method. Some relief followed, but burrowing had been so extensive that in the course of a few days nine widely separated foci of pus were opened, the highest just below the zygoma, the lowest at the origin of the sterno-mastoid and the one farthest distant over the insertion of the trapezius on the shoulder. In this case hydrogen dioxide facilitated tracing the pus and clearing the fistulae. The curette was used freely, deep sinuses filled with iodoform gauze and hot *antiseptic* compresses applied. The result seemed marvelous. The brawny hardening, together with the pain and oedema, disappeared. Under forced feeding through a tube, frequent change of dressing and tonic remedies, recovery was rapid. A salivary fistula opposite the cricoid cartilage delayed matters a little but all the sinuses eventually closed with but a minimum of scar tissue and very little disfigurement. The only antiseptic wash used was a solution of carbolic acid. Some blue skin had to be cut from around the openings of the sinuses. The exciting cause in this case could not be satisfactorily determined. When first seen by a physician he was directed to have a tooth extracted from the upper jaw, but it may be of interest to know that this tooth, as well as all remaining ones, was sound. Every indication pointed to the tonsil as the source of infection, as he had always suffered from attacks of follicular tonsillitis.

A second case, not quite so severe, was in much the same sodden, sluggish condition from too assiduous application of flaxseed poultices. When first seen the face was enormously swollen on the left side. The swelling was hard and livid. Exploration of the mouth, ear and nose failing to yield evidence of pus, the Hilton-Boser method was made use of and a quantity of pus liberated immediately in front of the ear. The same plan of curetting, packing and hot antiseptic dressings was employed as in the former case. Recovery was speedy save for a fistula of Stenos' duct at the junction of the middle and anterior thirds. The saliva escaped upon the cheek for a long time. Repeated probing or catheterization of the duct, the insertion of a linen thread tied over the cheek, and cleanliness, led to a restoration of the flow of saliva through the proper channel into the mouth. A very small scar remained.

In my hands the use of strips of iodoform gauze has proven preferable to drainage tubes, as the latter, no matter how flexible, give an unpleasant sensation of stiffness, especially when employed about the neck in pieces of any length.

In a third case coming under my care, central caseation was found, but no abscess nor fistula. A free incision was made in the neck over the node, the capsule was split and the node removed after tying* the pedicle. Usually the node will be found with a small afferent and efferent vessel. Two adjacent nodes were found involved and were also removed. Prompt healing showed that infection had extended no further.

This leads to the question of the removal *entire* of these caseated or suppurating nodes. It must be admitted that opinion is divided and perhaps with good reason. It is seldom that the entire system becomes infected from a degenerated cervical node, yet a case has been met with by me during the past winter where exhaustion and death ultimately followed suppuration, though removal of the infected nodes was attempted at an early date. The operation was made for the removal of suppurating glands in the submaxillary region in a woman aged 60. Hemorrhage was very free and the patient never fully recovered from the immediate effects of the operation.

If the glands are at all adherent, it is impossible to foretell how deep they dip down into the deeper structures of the neck nor what adhesions have formed. As in the case of all tissues of a similar nature, the removal of a portion does no good. In fact, their removal acts as a stimulus to the remaining portion leading to renewed and more vigorous growth. This fact has been observed repeatedly and I have had an opportunity to study such a case but recently. A middle-aged lady in whom the glands on the right side of the face were removed several years since for chronic inflammation, suffers from a paralysis of the right side of the face from severance of the anterior fibers of the seventh nerve. The lower lid, cheek and skin of the neck hang down in a lifeless manner producing an unsightly deformity. For a recurrence a second and a third operation have been made, and it is feared that the end is not yet.

Beyond the removal of freely movable masses in order that deeper and other glands may not become involved, it is safe to say that the question is in *statu quo*. The operation is in some cases a most formidable one and taxes the skill of the surgeon to the utmost. Finally, it should be remembered as a working rule that

in glandular enlargement, the primary cause must be sought elsewhere. All the neighboring organs must be examined and, in enlarged nodes in the neck, a careful search of the eye, ear and throat should be made for the causal indication. There are cases where the causal indication might be fulfilled and yet secondary troubles will not disappear, as in the case mentioned where caseous degeneration or actual suppuration has been set up in the gland. Even in these cases we must dispose of the cause also. Nothing in the practice of the surgeon is of more value and real comfort than a clear knowledge of one's own position, and a clear statement regarding the conditions present always tends to preserve the pleasant relation between physician and patient.

Briefly stated, then, it is probably a safe rule to remove freely movable masses so that neighboring glands shall not become involved by the extension of the inflammation. Only when *peril to life* can be thereby removed, should one feel justified in removing masses that dip down deep into the cervical structures. Further, then, this question must be one for the individual surgeon to determine, governed as he is by peculiar circumstances and conditions.

Mention of the use of ethereal solutions or oily mixtures of iodoform is omitted from discussion here for the reason that they have not been given sufficient trial by me in glands of the neck to warrant me in expressing an altogether satisfactory opinion.

I do not know if the views of the subject here expressed will be thought worthy of serious reflection. In my opinion, however, the presentation of the matter in its relation to diseased conditions and its association with complications that might be a guide to its intelligent understanding and an index in determining the amount and kind of remedial aid to be rendered is in line of progress if it renders us more competent to deal with it in a more rational manner.

The topic of suppurating lymphatic glands whether they be located in the neck or elsewhere, is not a new one nor has it yet been exhausted. There are a few points in connection therewith that will bear further study and explanation. No apology is, perhaps, needed for presenting this paper if, thereby, there may be brought out any new facts, others placed in a clearer light, or if a profitable discussion follows.

A TREATMENT FOR THE CURE OF INVETERATE
CASES OF TRIGEMINAL NEURALGIA.*

BY CHARLES J. ALDRICH, M. D.

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Dispensary; Neurologist to the City Hospital.

The title of my paper as given in the program is very comprehensive. A consideration of trigeminal neuralgia in its entirety would consume too much time and be a task that was not intended to be undertaken by the writer. It was my intention to deal with the treatment of trigeminal neuralgia, but when I began to consider the limitations of the paper, and the real object in view, it was realized that the proper title for my paper should be, "A Treatment for the Cure of Inveterate Cases of Trigeminal Neuralgia."

Before entering into a description of the treatment which I have found to be of signal benefit in this most trying of all neuralgic diseases, I wish to disclaim any originality in anything but the detail of carrying it out, and in the combination of the measures recommended.

It is not intended to speak of the mild and symptomatic neuralgias which are treated with good results by all general practitioners, but, as said before, to treat of those violent forms which are not infrequently sent to the surgeon for severe, mutilating, dangerous and usually unsuccessful operations for their relief.

It is useless to enter into a discussion of the pathology of the disorder in connection with this treatment, because, with one or two exceptions which will be remarked at the time the remedy is recommended, I believe that my treatment is almost exclusively and entirely empirical, but, like a number of empirical treatments, however, we should scan them closely and be prepared at any time to find that our empiricism has been based upon as sound pathological principles as we found underlying the empirical use of quinine in malarial fever.

There was not one thing that was original in the "rest cure" which was elaborated and put in practice by Weir Mitchell; neither did he claim originality for any of the procedures that he used in practicing it, but he certainly gained a great reputation

*Delivered at the Northern Ohio District Medical Society at Lorain, O., July 26, 1900.

through the combination of several well-known measures which he grouped under the title mentioned—"rest cure."

Treatment of a disease very frequently depends, not so much upon the accomplishment of an exact diagnosis and the application of a specific remedy for that particular disease, but more frequently in the judicious combination of measures calculated to benefit the sufferer.

For the cure of trigeminal neuralgia, Prof. Dana, of New York, some few years ago advocated the use of strychnia in increasing doses until the point of tolerance was reached. This treatment has received enough attention and popularity to be called the "Dana treatment." It has been used in the East with considerable success. The patient is put in a hospital where he can be closely observed, and if no contraindication is found, he receives a hypodermatic injection of strychnia three or four times a day, the dose being gradually increased until slight symptoms of strychnia-poisoning appear. I have been using this method of treatment for about four years and have succeeded in curing several very severe cases of neuralgia of the trigeminus but in quite a number of cases it has failed.

Feeling that the empirical use of strychnia in these cases would not meet all the indications, I have never neglected to treat the patient at the same time that I was treating the disease. The bodily functions were carefully looked after, and all sources of irritation, as carious teeth, middle ear inflammation, gouty diathesis, digestive disturbances, auto-intoxication, syphilis and malaria, were carefully considered. The condition of the arterial system was minutely examined. The vessels of the retina were carefully studied. Anything to indicate atheromatous disease or especially fibrosis of the arteries was carefully searched after, and in a number of cases I have demonstrated an arterial sclerosis, and quite frequently found that nitroglycerin in oft-repeated doses and carried to the point of tolerance gave relief. I recall one very severe case that was suffering from a tic douloureux of two years' standing, which, by the aid of iodid of potassium and frequent doses of nitroglycerin, was entirely cured and remained well for a period of six years. There was absolutely no syphilitic disease in the case but the arterial sclerosis was quite marked. This is in line with some later pathology of which we have no positive evidence, to the effect that cases of tic douloureux show that the small arteries which supply nutriment to the nerve are frequently sclerosed, thereby cutting off nutrition. Notwith-

standing these distinct gains in my knowledge of the treatment of the disease, I failed to relieve a distressingly large number of cases.

Almost three years ago my attention was called by a little note in one of the periodicals to the use of castor oil in the treatment of trigeminal neuralgia. At that time I was caring for one of the most severe neuralgiaform tics that I have ever had the misfortune to treat. Nearly all therapeutic measures had proven failures. The patient had received strychnia in ascending doses until she had a double ankle clonus and some stiffness and rigidity of the neck, yet her neuralgia continued. Grasping at anything that might be of aid in the case, I ordered her to receive two ounces of castor oil each morning before breakfast, given sandwiched between two layers of wine. The dose proved larger than was necessary and was cut down, first to one and a half ounces and later to one ounce. The result was that the pain disappeared in about four days, and although three years have elapsed there has been no return. This case had been examined by several surgeons and each of them with one exception had recommended resection of the nerve, the excepting surgeon recommending removal of the Gasserian ganglion. Not having the courage to go through these operations, and probably less to stand the mutilation necessary, she rejected their advice and finally came under my care with the result related. Since that time I have been using with success, and very much better success than ever before, a treatment which, given in detail, is something as follows:

The patient is put in the hospital in a quiet room under the care of first-class nurses; his mouth is carefully examined by a competent dentist, and, by the way, I usually find that the incompetent dentist has drawn about all the teeth the patient had, before coming to me, sound and unsound alike; the urine is carefully examined and the quantity measured; the abdominal and pelvic organs are examined with assiduous care; the heart, and, in fact, the whole circulatory apparatus as well as the blood is studied, and, to use a commercial phrase, "stock is taken" of all the organs and functions of the body. The first morning the patient receives the initial dose of castor oil, which is one ounce if the patient is not taking opiates, and two ounces if he has become an habitue or is temporarily using them. A solution of nitrate of strychnia is prepared, one minim of which should represent 1-200 grain. Of this solution he receives 20 m. four times

a day as the initial dose, with orders that each dose should be increased one drop every 24 hours, being an actual increase of 4-200 grains each twenty-four hours.

If the patient has been taking morphin, the least possible dose that will relieve the pain is continued for the first two or three days, after which time the dose is gradually diminished by the following method. If it requires one-half grain at each hypodermatic injection to relieve pain, an ounce solution is prepared, 30 m. of which represents one-half grain; this solution is kept where it will be in sight of the patient, and the nurse is instructed to come into the room with a syringe containing 30 m. of sterilized water, and when she prepares to give the morphia, the contents of the syringe are expelled carefully into the bottle, which should then be shaken and the usual dose drawn into the syringe and administered. Any competent nurse can do this without the patient being aware that his dose is diminishing every day. If these directions are followed you will have little trouble in weaning your patient from the morphia habit, which is almost as dreadful as the disease itself.

Of course in addition to this very simple form of treatment, it is necessary at times in suspected arterical sclerosis, to use nitroglycerin, and I wish to say a few words regarding the use of this drug in neuralgia. Nitroglycerin is very evanescent in its effects and should be frequently repeated in order to secure its benefits. I have found at times that it is necessary to give it every hour and in full doses, in fact, in as large doses as the patient can tolerate. After learning what the patient can bear it should be increased every day unless the patient complains too much of throbbing and pain in the temples. Not infrequently I have prescribed tablets of 1-100 grain, which at first produced much throbbing of the temples, yet inside of two weeks the patient could take as many as five or six such tablets each hour.

In some cases where we appear to have evidence of atheromatous disease I have found that the administration of thyroid gland along with nitroglycerin produced very good results, and these cases have seemed to me to get little benefit from strychnia, yet I have failed to meet a case wherein I have found that strychnia was absolutely contraindicated, or felt at any time that there was reason for discontinuing except when symptoms of strychnia poisoning appeared. In the treatment of these cases I have never felt completely satisfied until the strychnia produced very marked increase of all the reflexes.

Now a few words with regard to the symptoms of strychnia poisoning for which the physician should carefully watch the patient. I have been compelled on several occasions to administer stimulating diuretics for the purpose of increasing a very diminished urinary flow when the drug had been carried to a large dose.

The nurse should be cautioned and everyone about the patient should be cautioned against apprizing him of the nature of the remedy he is receiving. I recall one patient, who, while under strychnia treatment, got up a fair sample of strychnia convulsion. Satisfied that the convulsion was hysterical I stopped the strychnia immediately and later began the administration of distilled water, which resulted, as I certainly expected, in the elicitation of another very similar convulsion, thereby proving to me that the first was hysterical and that it is unsafe to allow the patient to know what remedy is being administered. The deep reflexes should be watched, the action of the jaw muscles tested and conditions of the neck and spinal muscles carefully observed.

I am completely at a loss to account for the remedial action of castor oil in trigeminal neuralgia. It is much easier to account for the action of strychnia, but why full doses of castor oil should be so effective in controlling some of the severest cases of neuralgia that I have ever seen is to me a complete mystery. It is actually curative and not palliative. There is nothing in castor oil of an anodyne nature, but it is possible that there resides in this common household remedy other properties of which we have little thought. Why castor oil should constipate after producing an active cathartic effect has never been demonstrated. It is the favorite prescription of mother and physician for the diarrheas of children which we know depend almost exclusively upon the presence of toxic bodies in the alimentary canal. Is it possible that neuralgia and particularly a neuralgia of the trigeminal nerve, is due to the absorption of ptomaines formed within that great bio-chemical laboratory? I have no answer to this, but can only return to the positive statement that castor oil has a markedly curative effect upon neuralgia of the trigeminal nerve. Cases that I have tried with the castor oil treatment alone and treated as patients up and about their work have not made the progress that those have who have been placed in a hospital upon the routine treatment recommended, and the individual treatment which has been suggested by the few remarks in this paper. There seems to be something in the combination, something essential in the following out of this detailed plan.

612 Prospect Street.

DETAILED MECHANISM OF GENITAL DISLOCATION.

BY BYRON ROBINSON, M. D., CHICAGO.

In the presentation of the cause of gynecologic dislocations the chronic, purely mechanical influence will assume a wide range. The infectious role plays a less general part, because it is more acute and temporary. The explanation lies in the fact that infection produces pelvic peritonitis, pelvic cellulitis and also parenchymatous inflammation of the pelvic organs which terminates in local cicatrical contraction which may last indefinitely, while the inflammatory process is but temporary. The symmetry of the pelvic structure is disturbed through adhesions and dragging or ultimately cicatrical contractions. The dislocation of the pelvic structures may last for years, and if they destroy the symmetry of the organs then the circulatory area is compromised or some nerve periphery must be compressed, and reflex is the necessary consequence. When a uterus has once suffered an attack of myometritis or parenchymatous inflammation it is almost forever after dislocated. The uterus becomes extended, excessive connective tissue becomes deposited along it, the lymph and blood vessels and both the blood vessels and the ever nerve endings are compromised by undue pressure especially at the periods of congestion and menstruation. The results are radiating storms of reflexes, not for a few days but for years, as the gynecologist knows will last more than a decade. It is true that a local infection may disturb evidently an area the size of a silver dollar and be accompanied by a certain limited storm of reflexes. But on the subsidence of this temporary, limited area of infection, the resulting cicatrization dislocates not only the limited area of infected structures but a large adjacent area of structures by dragging and dislocating them. So that the general cause of extensive dislocation or disturbed mechanism is a local infection, the one cog which unbalances the whole machine. The three segments of the abdominal viscera—digestive tract, genitals and urinary tract—are intimately related to each other by the peritoneum, the nerve and circulatory balance of viscera is evenly poised in delicate equilibrium. Infection with resulting cicatrization and dragging soon distorts the finely balanced anatomic and physiologic mechanism. Mechanic strains are reported to the organizing centers, for the system is awry with reflexes. Embryoneal local disturbances may arise of a non-inflammatory character as local cessation of growth of portions of the genitals. Emboli or

thrombi may plug an artery which supplies a definite area with resulting local atrophy of structures. This process will, by dragging, distort adjacent mechanism—produce dislocation. Such anomalies are not infrequent in the genitals at puberty. Also the puerperium, new growths and trauma cause distorted mechanism—dislocation in the genitals. The normal position of the uterus is a physiologic ante flexion. The uterus in physiologic ante flexion is soft, yieldable and can be straightened out. The ante flexion arises from conditions in embryo, the anterior angle is thickened and the posterior is thinned out. Intra-abdominal pressure forces the corpus uteri forward. By inflammatory processes the ante flexed uterus becomes stiff, hard and rigid. It will not bend but remains fixed in the shape of a hook. It is dislocated. In fact the pathologic ante flex uterus is bent on its anterior surface and is abnormally fixed, compromising circulation and compressing nerve periphery. The cervix of the uterus is firmly held in the strong pelvic fascia and levator ani muscle. The cervix may be compared to a flag staff while the uterus represents the flag, the mechanic forces allow the uterus to assume the four cardinal directions while the cervix remains fixed in the pelvic floor as a flag pole. The cervix or flag staff is held in equilibrium by the muscles and fascia of the pelvic floor. Intra-abdominal pressure plays the role of determining the position of the uterus. Normally the floor with the flag staff or the cervix and also the uterus moves freely in all directions, according to intra-abdominal pressure. Disordered movement in the floor and uterus itself arises from inflammatory processes—dislocating floor or uterus. It is a rare case which under crucial examination can escape the discovery that some portion of the pelvic mechanism, the peritoneum or viscera is not dislocated by embryonal arrests or inflammatory attacks. The chief ligamentous apparatus of the cervix is the ligamentum latum coli so well described by Mackenrodt. It is to the cervix what the ligamentum latum uteri is to the uterus. The significant role of the peritoneal ligaments of the genitals is daily palpable pathology to the gynecologist. In health the peritoneal ligaments aid the uterus in holding its equilibrium and in gliding about as the peritoneum is intimately fixed to the uterus; since it is evident that the uterus glides and moves with every breath, every word, step or dance it becomes apparent that peritonitis which fixes the genitals plays a disastrous role—it dislocates the pelvic organs, it compromises circulation, it compresses nerve periphery, initiates reflex nerve storms. In the dislocation of the

uterus, especially in the child-bearing period, the broad ligament plays a conspicuous part, and the vast majority of women are attacked with inflammation of it. The ligamentum latum uteri is attacked much more frequently than the ligamentum latum coli. The inflammatory attacks on the ligamentum latum coli are like the attacks on the ligamentum sacro-uterina, of a secondary nature and more of a chronic progressive nature. When the genitals are dislocated by inflammatory results in either the ligamentum latum coli or the ligamentum latum uteri the process is palpable and is nearly always secondary to peritonitis. Inflammation of the subserosium pelvicum is chiefly due to distribution through lymph channels. The ligamentum latum coli not only fixes the cervix in its strong grip but spreads like a sheath over the vagina, radiating in the body of the perineum but also passes backward into the ligamentum sacro-uterina. The ligamentum latum coli (cardinal ligament) send a sheath on the anterior vaginal wall between it and the bladder known as vesico-vaginal septum and in cases of shortening of the anterior vaginal wall it is this tissue which was inflamed. The recto-vaginal septum is another branch of this important ligament, which being attacked by inflammation contracts the posterior vaginal wall. Any portion of the pelvic forcia may become inflamed, and distorted by contraction. However, it is generally secondary to peritonitis.

The physiologic ante-flexion of the uterus must be considered a purely mechanical position. No inflammation has contracted any structure. Few are so fortunate in the puerperium that involution proceeds normally and uniformly. The corpus uteri may rapidly involute while the cervix may suffer subinvolution. Local pathologic parts may be palpable in many cases of puerperium. Besides retro-extension, retro-flexion, ante-extension, or ante-flexion with other deviations may succeed the puerperium. The gynecologist discovers discrepancies in the genital organs as frequent as the oculist does in the eye. Should the peritoneal and ligamentous apparatus of the uterus escape disastrous effects in the puerperium, parenchymatous changes of uterus, oviducts or ovaries are liable to arise, producing dislocation, fixations, extensions, flexions and torsions of the viscera are common after child birth, and the reason of sterility is dislocation of viscera or supporting apparatus. Through arrests of growth during puberty the cervix may remain parallel to the vaginal canal; this must be due to cervical and corporeal parenchymatous changes. In such cases the uterine body is small and the cervix long and large.

Also at the same time the anterior vaginal wall may be found shortened. The uterus is not normally flexible and it has generally assumed a retro-extension. In dislocated genitals the rectum and bladder can not act normally. Reflexes must arise with neurosis. Not only in the resting stage will the dislocated genitals irritate the bladder and rectum, but during the stages of congestion and well filled bladder and rectum reflexes will assume a maximum. The overfilled rectum and bladder is common with school girls, teachers, clerks and sewing girls, and long hours of overfilling produces continual irritation and local congestion. The congestion can result in oedema and deposit of connecting tissue. Many views of genital dislocation may be found in the excellent labors of Dr. M. Krantz, to whom I am indebted with thanks. If any part of the cervical supporting apparatus slackens or in other words atrophies, dislocation of the uterus follows. For example, in the puerperium the anterior vaginal wall is liable to become shortened and the ligamentum sacro-uterinum to become elongated, allowing retro-extension of the uterus by the following factors, viz: a. After delivery constipation arises from rest in bed, and attempts at compensation are brought about by increased intra-abdominal pressure, and to force the uterus backward. b. Overfilled bladder in the horizontal position tends to force the fundus backward. c. Distended rectum tends to force the cervix forward and to elongate the ligamentum sacro-uterinum. d. Slackening of the anterior vaginal wall (and its subseriosium) by the distended rectum forcing the cervix forward and the distending bladder forcing the fundus backward tends to atrophy and shortening. The pathology and consequent dislocation of the genitals resulting from the puerperium explains the one child sterility. The shortening of the anterior vaginal wall and atrophy of the ligamenta sacro-uterina is not only a pathologic process occurring in the puerperium but a quite similar process arises in the menopause. It is not infrequently accompanied by over bladder filling and retro-deviations. Distended rectum and overfilled bladder may be a persistent habit for many years. The retro-deviations may result also from heart valve lesions and consequent severe congestions of the uterus—hopeless cases unless the cardiac lesion can be relieved. Many forms of genital dislocations are determined by the portion of the fixation apparatus attacked, and kinds, certain grades arise from over filling of the bladder and rectum. These attack the anterior vaginal wall and the utero-sacral ligaments whence the cervix ap-

proaches the symphysis and the fundus the sacrum. Again, a not infrequent form of dislocation arises in visceral ptosis where the entire ligamentous peritoneal and muscular supporting apparatus is deficient. The uterus is excessively mobile—uteroptosis—and lies flat, posteriorly extended on the pelvic floor, obeying only the law of weight or gravity. In such cases the circulation is highly compromised—anaemia and congestion. The nerve periphery is extensively traumatized, and the abdominal brain suffers dragging. A well fitting abdominal support lends immediate aid. On account of the parenchymatous (myometritis) changes existing in a retro-extended uterus it is more serious than a retro-flexed one, which may be only accidentally forced into the usual position by mechanical causes, an overfilled bladder, rectum, excessive congestion or uteroptosis. Retro-flexion may also arise by slackening of the cervical supporting apparatus during the puerperium or some debilitating disease. During the puerperium microbes may have so infected the muscular apparatus of the pelvis (levator ani, coccygeus, pyriformis) that degeneration and atrophy results and the pelvic fascia has no power to put it on the stretch, hence the genitals will fall as dead weight on a slackened floor. With insufficient physiologic muscular contraction the pelvic organs are dislocated and circulation is badly deficient and congestion supreme. The loss of elasticity in the pelvic fascia, the atrophy and loss of volume in the pelvic muscles increases the pelvic ptosis, with consequent exacerbation in the waves of the pathologic sexual circle and increase in the accompanying reflex neuroses.

The symptoms of extension and version (myometritis) of the uterus are multiform. Symptoms of pain can not be differentiated to indicate a definite form of uterine deviation. Perhaps 75 per cent. of gynecologic disease is accompanied by some form of dislocation. The dislocations are complicated by so many varying factors that each individual case requires a thorough physical examination. The associated affections must always be considered, viz: First, the dislocation itself, and, second, complications accompanying the dislocation. The morbid complications of dislocation may be symptomatically cured without restoration of the dislocation.

In child-bearing life dislocation may occur without any known symptom, but this is an exception to the rule, for the congestion of menstruation induces pain.

As a rule the dislocation of the uterus previous and subsequent to menstrual life gives rise to no morbid symptoms. Hence it is always correct to ascribe existing symptoms to existing dislocation of the uterus. However, the extreme views ascribing all existing symptoms to an existing dislocation, is an exaggerated generalization. It is easy to attribute all symptoms to a dislocation, for a careful study of the case is not then required, and still easier to say the dislocation has no symptoms, for it is not necessary then to make diagnosis. Another quibble arises in gynecology as to what dislocation comprises. Some have thought the antelexion is a normal matter. The fact must be recognized that there is a physiologic antelexion and pathologic antelexion.

The physiologic antelexion is due to fixation, i. e., the uterus is curved on its anterior surface and is abnormally fixed—by its own walls or adjacent pathologic processes. We claim that in child-bearing life pathologic dislocation in a vast majority of cases give rise to morbid, reflex, neurotic symptoms. Doubtless the pain in dysmenorrhœa is really due to a dislocated uterus whose walls are stiffened by inflammation, myometritis, and the pain itself is the result of uterine contractions. The uterine contractions stimulated by congestions, mucus and blood, on the endometrial surface, continually gives rise to the uterine activity of a tender and inflamed myometrium.

The chief complications to be considered with a dislocated uterus are: (a) myometritis, (b) peritonitis, and (c) cellulitis. The end results of myometritis, peritonitis and cellulitis, are vascular strangulation and traumatized nerve periphery. Dislocated genitals is accompanied by compromising of circulation and traumatizing of nerve periphery.

A CASE OF SUDDEN BLINDNESS SUBSEQUENT TO CAUTERIZATION OF THE NOSE.*

BY ALBERT RUFUS BAKER, M. D., CLEVELAND, OHIO.

Professor of Diseases of the Eye, Ear and Throat in the Cleveland College of Physicians and Surgeons. Oculist and Aurist to the Cleveland General, St. Alexis and City Hospitals.

Mr. B——, aged 31 years. Married. One healthy four-year-old child. No miscarriages. Father blind, probably glaucoma, otherwise good family history.

*Read before the Cuyahoga County Medical Society, Feb. 1st, 1900.

First seen on December 7th, 1899. About two months previously commenced having obstructed nasal respiration. Consulted a physician, who diagnosed hypertrophic rhinitis. Not yielding to simple treatment the middle turbinated body of the right side was cauterized on Nov. 1st.

A week later the cauterization was repeated and following the last application pain developed on same side of the face, referred principally back of the eyeball. Patient had a chill on November 24th, and another on the 27th. Temperature was not taken, but felt feverish. Appetite good, but slept too much; frequently went to sleep while sitting in a chair. Never did so formerly.

On the 27th noticed blurring of sight of the right eye. Next day lower part of the field was obliterated, gradually progressing from below upwards, and three days later the eye was absolutely blind.

On the 3d of December there was a slight failure of sight of the left eye, and he consulted an optician, who prescribed spectacles. Patient continued at work, that of a salesman, until December 7th, when vision became so much impaired that he was obliged to discontinue work, and was brought to me by his attending physician.

I found the right eye absolutely blind, no perception of light, pupil moderately dilated, not responding to light or accommodation when fellow eye was covered. Ophthalmoscopic examination negative. Hyperopic astigmatism of 50 D. against the rule. Left eye—Vision snellen 20-70 increased to 20-60, with 50 D., axis 180. Test made under homatropine. Lower part of the field slightly contracted. Fundus normal.

There was a large offensive smelling grayish-green slough filling the right nostril, which was removed with difficulty, leaving a bleeding ulcerated surface.

Although I could get no specific history I prescribed 45 grains of iodide of potassium and 1-32 grain of bichloride of mercury daily. The K. I. to be increased 15 grains daily. Antiseptic washes were ordered for the nostril.

On the fourth day after the commencement of the use of the iodide the patient said that he was free from pain for the first time, and appetite good, and insists upon returning to work. I ordered the K. I. increased to 300 grains daily and patient felt so much better next day that he went to work, notwithstanding my protests. He continued to take increasing doses of iodide until 450 grains daily were given.

On December 13th vision improved in left eye to 20-30. On January 19th, 1900, to 20-20.

On December 18th, 1899, there was slight perception of light in the upper outer portion of right eye. On the 19th improved perception of light and slight reaction of pupil, and on the 20th perception of light extended to the median line and fingers can be counted. Vision rapidly improved and on January 9th he could read 20-60, field normal, and at the present time vision is perfect.

The case presents several points of interest. Naturally the first question that comes to me is that of diagnosis. Was this a simple case of hypertrophic rhinitis, or was it a gummatous tumour? The only evidence that we have of the specific nature of the lesion is the tolerance of the large doses of K. I., which to many minds would be sufficient. I am not quite so confident about this matter as formerly. I have met with many cases that were not specific that would tolerate large doses of potassium iodide. But, granting that the case is a specific one, what effect had the cauterization in producing blindness?

Cauterization of the nasal mucous membrane is reported by Zien in the *International Centrallblatt of Laryngology* in 1887, as having caused ocular trouble in two cases. In one case cauterization of the right turbinated caused right-sided amblyopia, while in the other case the eye on the side of the cavity treated presented marked venous engorgement with pupillary (?) hyperæmia.

Burgher in the *Journal of Laryngology* in 1887, also reports a case of marked amblyopia, occurring as the result of an application of the galvano-cautery to the nasal mucous membrane.

Bishop, in his recent text-book on the Diseases of the Ear, Nose and Throat, reports a case of Alt's of optic neuritis consequent upon cauterization of the turbinates in a syphilitic patient.

I have no doubt if time permitted, that a careful search of the literature of the subject would reveal additional cases.

LETTERS FROM PARIS.

BY H. E. HANDERSON, M. D., CLEVELAND, O.

(Continued from page 556.)

Of Paracelsus and Van Helmont, who posed as reformers of medicine, Patin enjoyed a similar opinion.

"Have you heard that Paracelsus is being published at Geneva in four volumes folio? What a shame that such a miserable book should find presses and type-setters, which are unattainable for

really excellent works! I would rather have them print the Koran, which is not so dangerous, and at least would not deceive the world so much. Chemistry is the false coin of our profession. I wish, for the good of the public, it was as well prohibited as false coins, for which ere now so many counterfeiters have been hung."

And again:

"As for Van Helmont, it is all over with him. He was a miserable Flemish rascal, who died insane some months ago (1644). He never did anything of real value. I have seen everything that he ever did. This man had no idea of anything but an art of medicine all filled with chimerical and empirical secrets, and, in order to overthrow more speedily scientific medicine, he declared himself a violent opponent of venesection, for the want of which he died raving mad."

Indeed our author had but a poor opinion of Dutch doctors in general, as well as of their patients.

"In Holland most of the sick have no faith in medicine and make no use of doctors, and for this reason, too, the majority of them die. The physicians very rarely bleed, because they do not understand the importance of such treatment, and because the sick are so stupid and sottish as to be entirely unwilling to be bled. Physicians ordinarily purge them with chemical pills and powders, or with antimony and emetic wine, of which they are miserable peddlers."

Patin's own antimonial creed (and doubtless that of the more orthodox of the Faculty) may be found in the following amusing extract from a letter bearing date June 18th, 1666:

"When you told M. de Lorme that Blondel was trying to prove antimony a poison, you say that he gave a high skip. It is not a bad thing that, at his age, he can still skip so well, and God be praised that he is still able to skip. But antimony has tripped up many a man who will never rise again and will skip no more. May God preserve de Bourbon and bring him back in good health, and, as he thinks of remarrying, I wish him as beautiful a wife as he can select. There is nothing like dying by a beautiful sword. One must enter with honor into the holy synagogue. I respect him highly, but my good genius prevents me from agreeing with him on the subject of antimony. I have never given a dose of it to any one, because I take no risks, and, according to the advice given to me more than forty years ago by the late M. Nicolas Pietre (who was to me a second Hippocrates and Galen), my hands have never itched to administer it to any person whatsoever. And in truth I believe I am right. It's a dangerous drug, and the few who have taken it and still live didn't need it. Nothing is easier than to say that antimony is not a poison; but it is not so easy to cure with it all sorts of diseases, such as the false prophets tell us about. When the question is simply one of speed and of

doing everything that antimony can do, and, indeed, doing it better, we have no lack of remedies. The apothecaries mix themselves up with party matters and are mad at the *Medecin Charitable** and the physicians, who, in order to prevent their tyranny, prescribe in French and prepare their remedies at home. What I have myself done in this line has been merely for the convenience of my families. Cassia, senna, syrup of peach-blossoms, syrup of pale-roses and of chickory compound with rhubarb, are sufficient for almost all cases. I have never seen a curable disease which could not be cured without antimony, although, to tell the truth, I also use for the most stupid patients (like some of our foreigners) confection of scammony, like diaphenic, *Diaprun solutif*. *Diacatharme*, *Dapsyllium*, *de Citro* and *de Succo Rosarum*. But one must look closely and not mistake a marten for a fox. The bilious and atrabilious bodies with which our cities are filled do not require such very active remedies, still less do they need colocynth, hellebore, antimony or other similar poisons. These gentlemen sometimes ask me why I do not use emetic-wine, which is an excellent remedy. My usual reply is that I am unwilling to put the life of my patients to such dangerous risks. Sometimes I pay them back with the apologue of our good Horace; or again with the reply of the fox to the sick lion who asked him why he did not come to see him: "Because, my lord, I see the tracks of those who have gone to visit you all turned towards your den, but I do not see the tracks of those who were returning." But God be praised for all his mercies while we await the *Factum* and the book of M. Blondel. We shall see what he has to say if his book appears speedily. For if it is slow in appearing I may perhaps be no more. I may have departed for that bourn, of whose map M. de Lorme and the courtiers know no more than I."

Patin was a great lover of books and prided himself greatly upon his cosy library, in which were to be found always the latest works in the latest and best editions. His correspondence also contains many criticisms upon books both new and old, many of them interesting if not always entirely just. A constant interchange of books between himself and his numerous and intimate correspondents is noticed in very many of his letters. It would be interesting therefore to know what so staunch a conservative as our author thought of Harvey's epoch-making "*Exercitatio anatomica*," which appeared at Frankfort-on-the-Main in the year 1628. Unfortunately I have not been able to find in his letters any criticism of this famous book, though his well-known disposition, as well as his warm friendship with the younger Riolan, leave little

*Probably a dispensary system similar to that inaugurated by the physicians of London at a somewhat later date and designed to protect patients from the rapacity of the apothecaries. An echo of the London system is preserved to us in the well-known poem, "*The Dispensary*," (1699), of Sir Samuel Garth, a famous Whig physician and member of the Kit-Kat club under George I.

doubt that he was a disbeliever in Harvey's discovery and an opponent of his doctrines. The only mention of Harvey which has met my eye is contained in a letter of Nov. 5th, 1649, and which runs as follows:

"M. Riolan is a very fleshy man, large and powerful, yet nevertheless threatened with death by asthma. God spare him yet many years, for he still labors every day for the public good. It is just about a year since he lost a formidable antagonist by the death of M. Hofmann, and two months ago he lost another in M. Veslingius, a physician of Padua, who died there the last of August *ex febre petechiali*. M. Riolan regrets their loss very much, for he likes to have everybody write in opposition to himself. This has been done recently by M. Harveus of London, who contradicts him in a little book dedicated and sent to him. Riolan is arranging to reply to him, and I shall be able to send you his book as a present by next Lent, if I live. Riolan will not begin the printing of it until after Twelfth-night." (i. e., January 5th.)

The Riolan here mentioned was the junior Jean Riolan (1580-1657), professor of anatomy, botany and pharmacy in the University of Paris, a man eminent for both his ability and his litigiousness. Veslingius, whose proper name was Johann Vesling, a native of Westphalia, was perhaps the most popular anatomical teacher of the 17th century. He was professor of anatomy and botany at Padua and died Aug. 30th, 1649, the victim of overwork on a botanical expedition to the Orient. John Evelyn gives us a picture of the anatomical lectures of Vesling, which he attended in 1646:

"Three days after this I tooke my leave of Venice and went to Padoa, to be present at the famous Anatomie Lecture, which is here celebrated with extraordinary apparatus, lasting almost a whole moneth. During this time I saw a woman, a child and a man dissected, with all the manual operations of the chirurgion on the humane body. The one was performed by Cavalier Vestlingius and Dr. Jo. Athelsteinus Leonaenas, of whom I purchased those rare tables of Veines and Nerves, and caus'd him to prepare a third of the Lungs, Liver and Nervi sexti par, with the Gastric Veines, which I sent into England and afterwards presented to the Royall Society, being the first of that kind that had been seen there, and for aught I know in the world, tho' afterwards there were others. When the Anatomie Lectures, which were in the mornings, were ended, I went to see cures don in the Hospitals; and certainly, as there are the greatest helps and the most skilfull physitians, so there are the most miserable and deplorable objects to exercise upon. Nor is there any, I should think, so powerfull an argument against the vice reigning in this licentious Country, as to be spectator of the miserie these poore creatures undergo. They are indeede very carefully attended, and with extraordinary charity."

The "little book" dedicated and sent to Riolan was, of course, the "*Exercitationes duae Anatomicae de Circulatione Sanguinis ad Johannem Riolanum, filium, Parisiensem*," published at Cambridge in 1649. Riolan remained, however, an obstinate opponent of the doctrines of Harvey, and it is scarcely to be expected that his protege, Patin, could have abandoned the teachings of his master and friend.

(To be continued.)

Abstracts and Extracts.

WM. CLARK, M. D.

NURSING AS A PROFESSION.*

BY MRS. HUNTER ROBB, CLEVELAND, OHIO.

Mr. Chairman, Members of the Board of Trustees and Managers, Members of the Graduating Class, Ladies and Gentlemen:

Until quite recently it has been usual in this country to ask some well known member of the medical profession to make the address to the graduating class of nurses. The fact that your Board of Governors has departed from this custom and selected a trained nurse to assist in performing this pleasant duty is an evidence, I take it, of a desire on their part to show the high appreciation in which this particular branch of medicine is regarded by them, while at the same time the innovation may be looked upon as an indication that nursing has reached its years of experience and that its representatives are now expected to speak with authority on the affairs pertaining to it. In this spirit I have accepted your kind invitation and have now the honor of addressing this, the first class of graduates, to go forth from the Albany Hospital. With these two thoughts predominating in my mind I have selected as the subject of my remarks "Nursing as a Profession."

In speaking of the work of the graduate, who has received her training in some one of our best hospitals, nursing has of late come to be spoken of in a general way as a profession. Not only is it not unusual to hear physicians make use of the term, and for members of other professions to confer upon our work the dignity of this title, and even among those of the general public, who have a broad understanding of the subject, are found many who classify it as belonging to the professions. On the other hand, there still remain some among the very conservative, or among those

* Delivered at the graduating exercises of the Class of 1900 of the Albany Hospital Training School for Nurses, May 10, 1900.

who have not taken the trouble to keep themselves informed on nursing affairs, who still have the impression that nursing consists chiefly in manual labor. Nor is it unnatural that people, who honestly believe this to be true, should proclaim that the old-fashioned nurse is good enough, and maintain that there is no necessity or scope afforded by the work for a high order of education. If these premises were true, it would have to be admitted that nursing has not the first elements of a profession, that the duties required are very simple, that the education of a nurse is complete when she has once learned to wash her patient, make his bed, take his temperature and prepare his food—in fact to do the ordinary duties that any of the old-fashioned nurses were qualified to perform—and that sufficient practical skill in her work can be imparted to her in the sick room without running the risk of spoiling her by demanding from her so dangerous a thing as knowledge, and thus rendering her something more than a machine. If these views are correct, certainly one would justly rank the trained nurse with persons following a trade for a livelihood.

To Elevate the Profession. One however can see many reasons why such opinions should still be held by some—although, I hope, by a very small minority—for the call is not far nor the years many since the day when the work of nursing was relegated to those among women who were not considered desirable candidates for the most menial of domestic work. The history of the events that have brought about so marked a change in the care of our sick is familiar to all of us, but the steps by which nursing has gradually come to be spoken of as a profession—whether deservedly or otherwise—may not be so well known. It may, therefore, not be amiss for us to-day to look into the subject sufficiently to find out upon what grounds the term has come to be used, and how far nurses are justified in appropriating the title; and furthermore, what steps are still necessary to elevate this new profession to its proper position among those which date from long ago. We all know that the tendency of the present day is to bring to a common level all things under the sun. In such a leveling process the proper order of things is not infrequently reversed, so that in some cases things of a low degree have become elevated, while others of high degree have lost something of their dignity and the awe and reverence with which they have previously been regarded has become lessened. As a consequence some of our most time-honored names and titles have not escaped unscathed and among the most conspicuous sufferers are the terms “professor” and

“profession.” There was a day when to be a professor was to bear one of the most honored of educational titles that a man could have conferred upon him by his fellows, while the distinct social status belonging to a member of a profession was accorded as the right of one to whom had been entrusted more than ordinary responsibility. But to a large extent the glory has departed, so that to-day to be a professor or a member of a profession is not necessarily associated with a great degree of learning or a highly responsible position.

In the Popular Sense. It may be that to many minds the use of the term profession in relation to nursing would only be accepted in the popular sense and that the title would not be regarded as deserving of honor from any high standpoint. For this reason alone it might be suggested that it would be as well for nurses to eschew the title until their worthiness to use it on its highest plane is more clearly demonstrated and until their claims to it are recognized as being beyond discussion. But it must be remembered that the vocations of the clergy, the physician and the lawyer are still held in some degree of reverence and that the term profession as applied to any of these classes of workers still possesses its full significance and implies more responsibility, more serious duty, a higher skill and an employment needing a more thorough education than is required in certain other vocations of life. That at the present time all these demands are made when the woman who undertakes nursing as her vocation is proved by the fact, whenever she falls short of a high standard, she is subjected—and rightly so—to the sharpest criticism, not only from the physician but also from an exacting laity. “To whom much is given from him shall much be required” implies also that from whom much is required to him shall be accorded not only the means for acquiring the knowledge necessary for such duties, but also the recognition that such work is of a high order.

To distinguish between the popular idea of the care of the sick and to justify us in our pretensions to the rank of a profession let us consider briefly the demands made upon the nurse by the scientific medicine of to-day. If nursing be the handmaid of medicine the evolution of the latter necessarily implies that of the former. Both must develop on the same lines and for both a careful training is necessary, since the modern scientific methods of medical treatment must inevitably be multiplied unless they are supplemented by the untiring and intelligent service supplied by

the trained nurse, who has allotted to her no small part in helping to bring cases of grave sickness to a successful termination. To take only one instance: it certainly requires more than mechanical skill on the part of a nurse to follow the preparations for an aseptic operation—full of significance in every detail—and the saying that “dust is danger” must have a bacteriologically practical application in her mind.

Operating Room Nurse. That the operating room nurse is now regarded as one of the important members of the surgeon's staff is fully demonstrated by the care with which candidates for such positions are selected. Nor can just any one appreciate the full meaning of the physician when he says “the nursing will be half the battle in this case.” In fact even the general public has come to recognize the important part that skilled nursing takes in caring for such diseases as typhoid fever and pneumonia, and other forms of infectious diseases, because of the constant and intelligent attention that is needed in such cases in the absence of the physician. To acquire not only the practical but the theoretical part of her work, the nurse must devote three years of her life to special preparation; during that time, besides being taught her practical work, she receives instruction in the principles of nursing by means of lectures and class room demonstrations in anatomy, physiology, materia medica, and massage. To fully appreciate the effect upon the patient of the air he breathes, and the food he eats, she must know something of ventilation, hygiene and practical chemistry. To become acquainted with the best forms and preparations of foods, by which the greatest possible amount of bodily resistance to disease is established and maintained, she must supplement her knowledge of chemistry by a special course of practical work in the diet kitchen. Such matters of detail are usually entrusted to the nurse, since she alone can devote to them the constant and unremitting attention that are necessary. The physician can lay down a broad general outline in such matters but the details—the little things that matter so much—must of necessity be left to the nurse, and this thoroughness is necessary because her knowledge must go far towards supplying that of the physician in his absence. As a physician has truly said: “The hands of a nurse are a physician's hands lengthened out to minister to the sick. Her presence at the bedside is a trained vigilance supplementing and perfecting his watchful care; her knowledge of the patient's condition, an essential element in the diagnosis of

disease, her management of the patient is the practical side of medical science. If she fails to appreciate her duties her physician fails in the same degree to bring aid to his patient."

Wider Duties. For the simple performance of nursing work such knowledge is requisite, but when the wider duties of either head-nurse in a hospital or those of a principal of a school for nurses are assumed, where one must not only know, but be capable of imparting that knowledge to others, the responsibilities become proportionately greater. To possess such qualifications one must have a good training as a nurse, for which nothing can be substituted. It means all the difference that lies between the skilled, practiced worker and the amateur; no native tact, no self-sacrifice—it is hard to say it, not even love—can supply its place. Nursing has thus become a matter of scientific discipline and a therapeutic agent of ever-increasing importance. In large part it is this ability that constitutes the difference between the graduate nurse of to-day, and the so-called nurse of former times, and that has rendered trained nursing worthy to rank as a department in scientific medicine. To be sure there still remains and must ever remain the side to nursing so often spoken of as menial; but no duty, however lowly, which is dignified by methods of thoroughness, and unsparing self-sacrifice can ever lower the status of those who perform them. Nor can I recall to mind any duty of a nurse, however trivial it may seem, in which a trained intelligence does not stand for something; in fact I know of no work where a greater range of widely different situations may have to be met, all of which call for a marked degree of adaptability. One day the nurse is busied in the wards of a hospital with all manner of diseases; at other times she finds herself in the homes of wealth and affluence surrounded by ease and luxury, while in the next week she may be summoned to the homes of the poor, to combat against dirt, want and ignorance added to disease, in which the most trying and disagreeable of tasks may be required at her hands; nor do the camps of war or the hot-beds of pestilence call upon her for aid in vain. Nursing, thus, makes great and varied demands upon her followers and exacts in no small degree the qualities of skill and tact, endurance and patience, which must be strengthened by enthusiasm.

The Higher Responsibilities. Can a woman, in any other kind of work she may choose for herself, find higher and graver responsibilities? Where human life and health are concerned,

what shall we term the little things, or the menial duties? The spirit in which she does it makes all the difference. Invested as she should be with the dignity of her profession and the cloak of love for suffering humanity, she should ennoble anything her hand may be called upon to do, and from work done in this spirit will her true recompense come to her far outweighing that of silver and gold.

But the nurse is also essentially an instructor, and her mission includes the prevention of disease as well as the relief of those already suffering from its ravages. In district nursing we are confronted with conditions which require the highest order of work, the actual nursing of the patient being, perhaps, a minor part of her work when compared with the influence for practical good exerted by the nurse upon those with whom she is brought in contact. To this branch no more appropriate name can be given than "instructive nursing," for educational, in the best sense of the word, it should be.

In the trained nurse then the public is by degrees coming to recognize a person of peculiar position and usefulness in the organization of society. She has her place—the wonder is that she has been so long in coming to it—she is no longer the willing hand of the pitiful heart, the soother of the fevered brow; she is far more, for to the willingness of the hands she has added experience, while to the pity of the heart she has added knowledge thus increasing an hundredfold her power for good. No longer can she with justice be regarded as a better trained, more useful servant, but as one who has knowledge and is worthy of respect, consideration and proper recompense as being in a certain degree a member of a profession.

There are some of the essentials in nursing by which it has come to be looked upon as a profession,—sufficient truly, did we all possess them, to rank us high among those established in by-gone centuries. Wherein, then, do we fail to meet these high obligations? To begin with the nurse is only mortal and must of necessity share some of the infirmities of her fellowmen which prevent the accomplishment of perfect work. But surely everything should be done to minimize these imperfections and one crying evil, which calls loudly for reform, may be mentioned here.

No Standard for Nurses. Unfortunately at present there exists no legally recognized standard for nurses; there is no law similar to those dealing with the medical profession, which re-

quires that a trained nurse shall have spent a certain definite time in a recognized general hospital, that she shall have had certain definite instruction in special studies and methods relating to the care of the sick, that she shall be required to pass specified examinations, and shall hold a certificate, before she is lawfully entitled to practice her profession. As a consequence, we find schools for nurses established in all kinds and conditions of hospitals, all grades of instruction given and all manner of women practicing both in and out of hospitals. If a pupil is dismissed for cause from a high grade school, it will be usually found that she is accepted into some other school, where they are glad to get any one to do the nursing work, whence in due course she graduates as a trained nurse; worse still, who can prevent her from beginning to do private duty at once and from posing as a hospital nurse? With hundreds, or indeed thousands, of these so-called nurses claiming sisterhood with those who have spent time and money and strength in preparing themselves for their work, and with the sometimes imperfect nursing of the regular graduate, what wonder that the name and the presence of the trained nurse do not always carry with them the sense of confidence and comfort that should legally belong to them? So long as we are without some recognized standard to which each so-called trained nurse should be required to come up, so long shall we be unable to qualify as forming a profession, for the criticisms so often heard are in the main just; the leveling process brings all down, the competent nurse being confused in the minds of the public with the inefficient and the woman of commercial mind.

I am sure that even the best among us are ready to acknowledge our imperfections, and the steady hard work that has been done in the past ten years and the continued effort towards improvement shows a healthy dissatisfaction, which augurs well for the betterment of the future nurse, and proves that we at least appreciate the fact that for the care of the sick every year a higher training is being surely and steadily demanded, and that only a high order of woman can meet these requirements.

A Code of Ethics. But it still remains for me to speak briefly of another phase to nursing, without which the professional side would be dead and spiritless. A well defined code of ethics is also one of our needs as a profession. From this ethical standpoint nursing is a *calling* and should be a consecrated service, performed in the spirit of Christ who made himself of no ac-

count, but went about doing good. The women who fail to bring this spirit into their work, miss the thing of greatest value that is to be found in it, and too often prove deserving of the criticism that the life is apt to make a woman hard, cold and mercenary. The scientific, the educational side is important, and can hardly receive too much consideration, but equally with it should each nurse see to it that the spirit of love for the work's sake is fostered and developed; for if this be neglected we can never hope to possess a professional code of an eminently practical and helpful nature.

In these few words I have endeavored to bring before you some of the responsibilities and privileges that each of you and all other graduates assume. Remember that this high conception of our work carries with it the obligation that every individual by her actions and by her personal character shall maintain its dignity untarnished. To bring to it any less than the very best that is in you will cause it to sink in the eyes of the public and bring discredit both upon it and upon you. Let each member of the first class to graduate from the Albany Hospital see to it that she takes away with her and jealously guards an individual high standard and interest in her work without which she can never justly claim to be a member of the profession of trained nursing.—*From September Albany Medical Annals.*

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THE CENTENARY OF THE ROYAL COLLEGE OF SURGEONS.

A LETTER FROM DR. OSLER.

Through the kindness of the President, Sir William MacCormac, I have been a delighted participant in the festivities of this celebration, an account of which will, I am sure, be acceptable to the readers of the *Maryland Medical Journal*.

First, a word about the college. From time immemorial there had been in London a guild of surgeons, which, in addition to other duties, had control of the barber-surgeons, the group of mechanicals who cut hair, bled and cupped. The two guilds were united in 1540 under the title of the "Masters and Governors of the mystery and Commonalty of the Barbers of London." For 200 years this remarkable union persisted, to the great injury of the surgeons, who, in 1745, obtained a separate incorporation. In 1796, owing to certain irregularities, the Company of Surgeons forfeited their charter, and it was not until March, 1800, that the

Crown granted a new one. The centenary of this incorporation was the occasion of the celebration, of which I will give you a sort of diary.

On Wednesday, July 25, the morning was devoted to demonstrations in the museum of the Royal College of Surgeons and in the conjoint laboratory of the Royal College of Surgeons and the Royal College of Physicians. The crowning glory of the college is the Hunterian Museum, a worthy monument to its great founder, whose original specimens formed the nucleus of the collection, now the most extensive and best arranged in the world. Professor Steward and Dr. Shattock took groups of visitors about the rooms and demonstrated the more interesting specimens, showing particularly those which illustrated the technical skill and the brilliant experimental genius of the great Hunter. I cannot here dwell upon this feature of the celebration, but I would advise physicians visiting London not to let twenty-four hours pass after their arrival without paying homage at the shrine of John Hunter in Lincoln's-Inn-Fields. The museum is open at 10 a. m. daily, except on Friday and Saturday, when women students only are admitted.

Dr. Brodie, the director of the conjoint laboratory, gave lectures and demonstrations on the special work on which he is engaged, viz., a study of the properties of the antitoxic serum. He is a clear and attractive lecturer, and it was pleasant to see how much good work he has in progress. He demonstrated an ideal kymograph, one of the most perfect and beautiful pieces of mechanism I have ever seen.

In the evening the President and the council gave a conversazione in the museum and library, the spacious rooms of which are especially well adapted to such a purpose.

On Thursday the conferring of the honorary fellowship upon a selected group of distinguished surgeons drew a most brilliant gathering to Burlington House. The President was supported on either side by the Premier (Lord Salisbury) and the Earl of Rosebery, while the council and the senior fellows of the college occupied seats on the platform. In the arena, arranged in two rows, sat the surgeons selected for the honorary fellowship. Like a sensible man, the President cut down his address within half an hour. He took up the history of the growth of the college, and gave interesting biographical sketches of the past Presidents.

Lords Salisbury and Rosebery were first made honorary fellows, and then the visitors were called out in alphabetical order. From each country three or four of the most eminent surgeons had been selected for the honor—in all thirty-four. The variety of the academic costumes added greatly to the brilliancy of the affair. The Spanish surgeons were resplendent in a remarkable garb—a purple cassock-like garment surmounted by a cape of brilliant yellow. The French surgeons, Lamelongue, Ollier and Pozzi, while less adorned, were conspicuous figures. Von Bergmann, ablaze with orders, Kuestner, Koenig and Kocher were the German surgeons. From the United States representative men had been selected from four teaching centers—Warren from Boston, Wier from New York, Keen from Philadelphia, and Halsted from Baltimore. Two Irish surgeons, Bennett and Ball, and MacEwen from Glasgow also received the diploma. Escorted to the President by Mr. Langdon and Mr. Henry Morris, the vice-presidents, the recipients were greeted with rounds of applause. Two men had especially warm welcomes—Von Bergmann (whom many, I suppose, felt had been hardly used in the case of the late Emperor Frederick), and MacEwen, the foremost active surgeon of the empire. In spite of the heat it was a most delightful ceremony, conducted with much grace and decorum.

At 8 o'clock a dinner was given by the college in the hall of Lincoln's Inn, one of the law societies. It was the best-ordered large dinner I have ever attended. We sat down about 8:15, and rose about 11:15. A more distinguished company has perhaps never been gathered to do honor to the profession. To the right of Sir William MacCormac sat the Prince of Wales, the Portuguese Minister, the Marquis of Salisbury, the Duke of Northumberland, Lord Strathcona, Lord Kelvin and a group of honorary fellows. To his left sat the Duke of Cambridge, Earl Rosebery, the Lord Chancellor, Lord Lister, the Lord Mayor, and other honorary fellows. The members of the council occupied seats at the ends of the eight long tables. Among many excellent features of a most exceptional dinner may be mentioned the shortness of the speeches and the softness of the music. The Prince of Wales spoke with great clearness and directness, and was well heard by everyone. He acknowledged most gratefully and gracefully the debt he owed to the President on the occasion of the serious accident to his knee. The only other speech of note was by Lord Rosebery, who, witnessing the harmony existing in the medical profession throughout the world, expressed the hope that

perhaps through science might yet be realized that peace on earth to affect which all other means had failed. There were several remarkable bits of plate on the table—one the silver grace cup presented to the Barbers' Company by King Henry VIII in 1540 in commemoration of the union of the barbers with the surgeons. Pepys mentions this (as was stated) in his diary "among other observables at Chirurgeons' Hall, we drunk the King's health out of a gilt cup given by King Henry VIII to the Company, with bells hanging at it, which every man is to ring by shaking after he has drunk up the whole cup."

On Friday morning the librarian of the college had on view the chief literary treasures of the library. A collection of the portraits of the older surgeons and of the past presidents had been arranged. At one end of the library hung pictures of the great brothers, John and William Hunter. With the well known portrait of the former by Reynolds you are all familiar. Seated in a chair is a man of mature years and fine presence, who is looking up in an abstracted manner. This portrait is in striking contrast with that of a young man, thirty perhaps, with a strange face, uncouth, rough-looking, not intellectual, with bleary eyes and a bright red head. The dress matches the face, careless and unkempt, and a rough yellow jacket, one lapet of which is out, the other tucked in. Altogether it is a most unpleasant picture of the great man, but no doubt true to life at the period when taken, for John Hunter was a bit of Scotch granite, and he had not the prolonged and careful polishing of his brother William, whose portrait shows a face of great refinement and intellectual strength. Home's portrait of John Hunter, the one referred to, should be reproduced, as it emphasizes the truth of Shakespeare's dictum "There's no art to read the mind's complexion in the face," a dictum which we teachers are too apt to forget.

The ceremonies concluded with a reception by the Lord Mayor at the Mansion House.

Sir William MacCormac may be congratulated on the brilliant way in which the centenary was celebrated. We all expected much from a man whose executive abilities are well known and have been so well tried. In all of its details the celebration could not have been more satisfactory, and perhaps no other member of the profession in England could have commanded the social and intellectual support which helps so much to make these occasions memorable.—*From Maryland Med. Jour.* W. O.

CONTRA-INDICATIONS TO THE USE OF DIGITALIS.

M. Lucas-Championniere (*Journal de Med. et de Chir. Practiques*, April 10, 1900) says:

It is good to know the contra-indications as well as the indications in the use of digitalis, for where the latter is unserviceable it is certainly harmful, not only by reason of the accidents it may provoke, if continued, but also and chiefly because on the one hand it becomes less efficient when repeated, while on the other it is not tolerated a long while. Now, then, the indications being frequency, irregularity, weakness of the pulse-beat and dropsy of the connective tissue, or of the serous membranes, it can be said, in a general way, that any other condition forms a contra-indication. But we meet with circumstances which demand particular attention.

In the first place, there are certain misleading forms of permanently slow pulse, in which the pulse is only apparently slow owing to the fact that the heart, being in a weakened state, the cardiac beats are not all felt at the radial. This kind of slow pulse, while not indicating digitalis apparently, does actually indicate the use of it. Next a frequent, irregular and weak pulse, although in a general way indicating digitalis, may be due to conditions actually contra-indicating it, as for instance severe myocarditis, profound adynamia, senile cachexia, cardiac dilatation liable to cause at any time severe cardiac asthenia, finally fatty degeneration. In all such conditions where the myocardium is altered, not only is digitalis poorly if at all efficient, but it may cause accidents and dangerous ones at that. Consequently, whenever any of these conditions is suspected, it is indicated to either abstain from or be very cautious in using digitalis.

Again, a case of incompetent aorta forbids in general the employment of digitalis; yet, when the cardiac beats are increasing in number, digitalis is serviceable. Dyspepsia is a contra-indication to digitalis, for patients do not bear it well or retain it at all, and most unfortunately, the hypodermatic administration is too painful to be thought of as a permanent substitute.

Any form of cachexia also prohibits the use of digitalis; finally, when the drug has already been used, it is safer not to use it again, for the prior administration not only hinders its efficacy, but it accumulates its noxious effects.

With reference to the dangerous accidents which occur during digitalis medication, not every one is familiar with them, or at least not every one interprets them correctly.

Very often there happens at night some delirium which passes unnoticed. Next, follow pallor, lowering of normal heat, agitation, anger (a feeling of constriction at the epigastrium, with a great difficulty in breathing), and contraction of pupils. When a case goes that far a fatal syncope may come suddenly; some, however, pass away gradually.

Death from digitalis happens chiefly in cases of Bright's disease, arthritism, severe anemia, aortic incompetency and delirium tremens.

The use of digitalis is followed at times by typical psyches, melancholy and agitation without marked disturbances of the circulation.

In cases of diminished diuresis the dose is increased, intoxication takes place, and the patient dies suddenly.

Finally, digitalis may indirectly cause apoplexy of the lungs, when there exists a tricuspid incompetency, for the pressure, usually lowered in the pulmonary artery, is suddenly raised and some of the vessels may burst under the strain.

For that reason, the dose of digitalis in cases of tricuspid incompetency must be reached gradually, the increase being say one-fifth of a milligram at a time.—*Indian Lancet*.

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WOODBIDGE TREATMENT OF TYPHOID FEVER.

It is understood that a board of medical officers, convened to investigate the merits of the Woodbridge treatment of typhoid fever as carried out at the Fort Meyer General Hospital during the war with Spain by Dr. Woodbridge himself—then major and surgeon, United States Volunteers—finds a mortality of about 10 per cent. of all cases treated by the Woodbridge method and about 7 per cent. of all cases treated by other methods. In all, about 600 cases of typhoid fever were treated at the Fort Meyer Hospital; of these 57 were treated by Dr. Woodbridge, who was afforded every facility in the application of his method.—*Philadelphia Medical Journal*.

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My views on the operative treatment of typhoid perforation may be summarized as follows:

1. The surgeon should be called in consultation the moment that any abdominal symptoms indicative of possible perforation are observed.

2. If it be possible to determine the existence of the perforative stage, exploratory operation should be done under cocain anesthesia before perforation, shock and sepsis have occurred.

3. After perforation has occurred, operation should be done at the earliest possible moment, provided:

4. That we wait till the primary shock, if any be present, has subsided.

5. In a case of suspected, but doubtful perforation, a small exploratory opening should be made under cocain to determine the existence of a perforation, and if hospital facilities for a blood count and for immediate bacteriologic observation exist, their aid should be invoked.

6. The operation should be done quickly, but thoroughly and in accordance with the technique already indicated.

7. The profession at large must be aroused to the possibility of a cure in nearly, if not quite, one-third of the cases of perforation, provided speedy surgical aid is invoked.—*W. W. Keen, M. D., in Jour. A. M. A.*

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Creosote has won its way into therapeutics by real merit. By results it has proven itself to be a most efficient remedy in the treatment of phthisis, and it is the one drug now relied upon to combat the ravages of this disease.

Creosote and its congeners—members of the guaiacol group—possess decided antiseptic and antitoxemic action, and prevent or minimize those fermentative processes which contribute so largely to failure of the digestive processes in every chronic wasting disease. Whatever may be the real secret of its *modus operandi*, one fact is prominent that creosote increases the appetite and the digestive power, and subserves the well being and the up-building of the patient.—*Med. Summary.*

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It has been said that it was impossible to render the alimentary canal aseptic by the administration of drugs, an opinion in which I have always heartily concurred; but I was surprised a year ago to find opposition to this treatment from some of our surgeons who practice aseptic technic in their operations. If they will but reflect for a moment, it is this same broad principle which, applied to surgery, has rescued it from a chaotic state of empiricism and elevated it to a scientific basis. Would any

modern surgeon fail to wash out and drain an abscess cavity because he could not render it aseptic at the first operation? Should he fail to irrigate an infected wound because he could not cleanse it of every drop of pus and every micro-organism at the first irrigation? If a patient is bleeding from three ruptured arteries, and from an anatomical situation one of them can not be reached, does it lessen the obligation of the surgeon to place a ligature around the other two? So in typhoid fever, if we cannot thoroughly disinfect the bowels and thus reach ideal results, must we peacefully fold our hands and acknowledge with mortification and chagrin that we can do nothing but amuse the patient by pouring cold water on the skin? Is this the course the surgeon pursues in a case of infection? Is it not our plain and unequivocal duty, with our present knowledge of the causation and pathology of typhoid fever, to resort to the following measures? First, such as will remove as far as possible the offending agent from the bowels, and, secondly, such as will render the intestine as far as possible an unfit culture-tube for multiplication and development of the various micro-organisms which are to be found there, as well as prevent fermentation and putrefaction of food products. Is not the efficacy which has for a long time been attributed to that good old remedy, turpentine, been due almost exclusively to its antiseptic properties.—*T. Virgil Hubbard in Medical News.*

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There is practically no drug of value which in the hands of the careless or ignorant would not do harm. Quinine is a specific in malarial fever. Mercury is a specific for syphilis. But who will deny that you can kill a malarial patient with quinine and a syphilitic with mercury? Does this fact, however, lessen their value when properly, carefully, and scientifically administered in these diseases?

It is to the proper administration of calomel in typhoid fever that I desire especially to call attention. If those gentlemen who are skeptical regarding the efficacy of this treatment will administer the drug in small and oft repeated doses, carefully watching for its constitutional effect, they will find that it will control the unpleasant symptoms and fatal tendency of this disease. While it has this effect in small doses, yet to give it in five to seven-grain doses three times a day would be as irrational and as open to criticism as to start a syphilitic on the same large dose. I have

conclusively proven that a typhoid patient can take more mercury without purgation or salivation than the same individual can take when not suffering from the disease. I think we may attribute some of the good effect of mercury in typhoid to the stimulation of the production of white blood-cells which are the great protectors of the system in all infectious processes. While I can not state this positively, because I have not counted the cells while a typhoid patient was taking mercury, yet I think we are justified in assuming this on theoretical grounds.—*T. Virgil Hubbard in Medical News.*

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We have received for notice a tract treating upon medical legislation, Gov. Thomas' Veto of the Colorado Medical Bill, The Love Medical Bill of Ohio, and Medical Ethics. It bears all the ear-marks of having emanated from the mind of an osteopath or at least from what he chooses to call his mind. As an example of mental strabismus it is unsurpassed. The following quotations from it show well its character:

No doubt the majority of doctors are sincere in the opinion that medical legislation for which they are asking, is really in the interest of the people. They forget that all progress has been made by departing from the ruts of established rules. Progress in science, theology and medicine has been made in spite of, not by aid of, the regularly established schools.

A medicine may cure thousands of people of some chronic ailment. Its fame may spread and its beneficence become an incontrovertible fact, yet the doctors would oppose the sale of this medicine simply because it did not originate with them, and is not prescribed by them. They not only wish to have laws protecting them from the competition of practitioners of medicine who have no diploma, but they also wish to shut out many doctors who have diplomas.

They wish to create boards of censorship, who shall have the authority to say that this man may practice medicine, and that man may not, without any reference to the medical education they may have received.

It is true that charlatans, loud in pretense and reckless in the application of remedies, abound, and that they take advantage of the afflicted by giving assurance to their hopes, only to rob them of health and substance, but this is only saying that bad men abound in all professions. Legislation cannot destroy them. They will exist so long as human kind remains unchanged.

Nearly every advance in the treatment of diseases, in the methods of their detection, and in the prevention of their occurrence, has been made by physicians in disregard of the regulations of the order; and the great body of their brethren, after denouncing and enduring, have ultimately accepted the unquestionable results of these researches and discoveries, and made them respectable by adding them to the category of the recognized and the regular. But for this, the leech, the lancet and the pill box would still be the regulators of the public health, and the licenses to practice would be confined to these, and these only who used them.

Concerning the Love medical bill and the Ohio State Board of Registration the following criticisms are offered:

This board is to be further guarded from doing harm, by the fact that no one of them shall be connected with any medical college, directly or indirectly. Now as a matter of fact, it would be impossible to find such a doctor. They all have indirect connection with medical colleges. They would no more think of doing anything to cast a reflection on the particular medical college from which they graduated, than one of the professors of that college would think of doing so.

Each school represented on the board would be glad to shut out the other three schools represented, if they could do so, but if they undertook that their applicants would get shut out in retaliation. So it is, they are obliged to compromise with each other.

Each applicant is required to pay \$25 in advance. If the board chooses to turn him down, and refuses to grant him a certificate for any reason, his money is not returned to him. The applicant has simply "blowed" himself for \$25 just the same as if he had dropped it at a poker joint or a horse race.

The colleges ought to be made responsible for their mistakes. As it is now, there is nothing to hinder a college from luring incompetent young men to take their course of instruction, and then granting them diplomas when they know they are not fit to practice medicine. They have no longer and further responsibility in the matter. A medical board of examination has been appointed to protect the people from incompetent practitioners.

Think of a man lying in the county jail for sticking a porus plaster on his wife's back, or cutting a corn off his neighbor's toe. Think of a woman being imprisoned and fined for recommending

catnip tea for a sick baby, or syringing out a sore ear. Yet this is exactly what could be done under the provisions of this act.

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I am convinced that a large number of typhoid patients have died from want of food, and it is equally true that a great many have passed to the "beyond" because they were unable to digest and assimilate what was given them, owing to the torpid condition of the liver and diminished secretion of gastric and intestinal juices, a condition which could be largely overcome by the administration of proper drugs. The ulceration of the bowel has been the great bugbear of the physician; the objective point on which he has centered his therapeutic vision, and yet if it does not produce perforation or a fatal hemorrhage it is of no more prognostic significance than if it were on the leg of the patient, barring the exception that it may act as an absorbing surface for other germs than the bacillus of Eberth.

While the attention of the physician has thus been directed to the condition of the bowel and temporarily distracted by the fear of perforation or a fatal hemorrhage, which only occurs in about two or three per cent. of the cases, he has wilfully and persistently neglected those measures at his command which would prevent the death of his patient from exhaustion and toxemia. Some old writer has said that the physician should always obviate the tendency to death and we can sometimes learn more from one case that dies than from ten cases that recover by studying the cause of the death. I think we shall gain some practical information by closely observing the cause of the tendency to death and become more active in the use of those remedies which combat that tendency. The sooner we look upon typhoid fever as a constitutional poisoning of the system very similar to an average case of septicemia and treat it accordingly by assisting nature to eliminate the poison or destroy it in the system, the sooner we shall diminish the mortality of this disease.—*T. Virgil Hubbard in Medical News.*

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Except in the grosser lesions involving the motor areas particularly, localization of disturbed cerebral functions has generally been of but little practical value in indicating the point of the brain most importantly involved. The reasons for this are:

First. In the larger majority of brain traumatisms multiple lesions exist, many special functions are involved and conflicting symptoms appear.

Secondly. The general symptoms of cerebral shock (or concussion, if you will) and compression usually so cloak the symptoms pointing to special regions involved, that important lesions cannot be discovered.

Thirdly: The general depression common to various lesions may be so prolonged, that, when it is relieved, the symptoms pointing to special obtunded functions may be discovered too late to be of working value, secondary changes having destroyed the cells of the particular regions involved.

Lastly. While in some regions of the brain a cerebral function is circumscribed to a particular small seat, in other parts it is diffused over large areas; here compensation of the obstructed functions is early taken up by unaffected cells, the functions are restored, and the significant symptoms have disappeared before the general depression has passed off; partial loss of power of the part affected may later become permanent when secondary changes have destroyed the involved area. To make cerebral localizing symptoms of working value, their study should begin with the beginning of the case, watching for their earliest manifestations in the midst of the symptoms of the general traumatism.—*Howard J. Williams, M. D.*

There is a woman in Allegheny who dearly loves to use big words, and does not always use them correctly. The other day a neighbor complained of pain in her back, whereupon the user of big words said, "I would consult Doctor Pelletts for pains in the back. He's the finest backteriologist that I know of."

The late Lord Coleridge owed his success as a lawyer to one little incident in his early days. While pleading in a country town the cause of a man on trial for murder, the one candle in the jury-box flickered and went out. The court-room was left a moment in solemn darkness. When the usher replaced the light, Coleridge said: "Gentlemen of the jury, you have a solemn duty, a very solemn duty, to discharge. The life of the prisoner at the bar is in your hands. You can take it—by a word. You can extinguish that life as the candle by your side was extinguished a moment ago. But it is not in your power, it is not in the power of any of us—of any one in this court or out of it—to restore that life when once taken, as that light has been restored." The jury acquitted the prisoner, and John Duke Coleridge was never afterward a briefless barrister.

THE Cleveland Medical Gazette

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NO. 1.

Editorial.

DR. RALPH J. WENNER.

Dr. Ralph J. Wenner, one of the brightest and best known of the younger physicians of Cleveland, died at his home on Handy street, on the 9th of October. Thus was the old adage, "Death loves a shining mark," exemplified. His disease was typhoid fever of the ambulant type, and after the second week of its course it became necessary for him to go to the bed upon which, after six days, God's finger touched him and he slept.

The funeral occurred at his residence October 11th. Many of the physicians of the city and from out of the city were in attendance; likewise many of his former patients, who held him in grateful memory. His remains were deposited in Green Lawn cemetery, Tiffin, in which city he was held in high esteem, the medical profession being largely represented at his interment. In respect to his memory the public schools of Tiffin were closed during the last sad rites.

Dr. Wenner was born in the city of Bucyrus, Feb. 11, 1870, from which place his parents removed to Tiffin. At the latter place he graduated from the high school and soon after he became a student of the Ohio Wesleyan University, Delaware. His health, however, failing, he was obliged to leave the University and he passed some six months on a cattle ranch in the far west when health was restored. Returning to Tiffin, he studied medicine in the office of his brother, Dr. Harvey L. Wenner, for a year, and then entered the medical department of the Western Reserve University, at the same time being a student in the office of Dr. X. C. Scott. After his second year he entered the medical department of Wooster University, graduating in 1892.

He then became resident physician in St. Clair Hospital for nine months, after which he was an assistant to Dr. A. F. House for a year and a half, going then to Vienna, Austria, for six months to further pursue his studies. Upon his return he resided with Dr. House as his assistant for four years.

In October, 1898, he married Miss Della Hollinger, of Sandusky, who, with a daughter, survives him.

At the time of his death he was one of the visiting surgeons to St. Clair Hospital, was a member of the Cleveland Medical Society (and its secretary in 1899), member of the American Medical Association and the Ohio State Medical Society, in all of which he was active, faithful and attentive. He intended in due time to devote himself entirely to surgery and abandon the general practice. He was progressive, and the remedy of yesterday he deemed insufficient when the progress and experience of to-day taught him that there was something better. He not only esteemed it a duty, but it was his delight to inform himself of the progress and discoveries in his profession. He recognized that to be successful he must keep up with the progress science is continually making in the profession. The standard of the present was his aim. In Dr. Wenner's death the medical pro-



DR. RALPH J. WENNER.

fession has lost an esteemed member, the community a good citizen, and his untimely taking off is mourned by countless friends.

A. F. HOUSE.

THE INTENT OF THE LAW.

The *Columbus Medical Journal* in its August number pleads extenuating circumstances for the State Board regarding the low grade of examination which it requires for admission to medical colleges. It acknowledges the correctness of the statement made in the GAZETTE that the course required by the State Board was but little more than one-third of that required to secure a diploma from high school issued after four years of study. Technically the editor is probably right—that the board had an option, but where a board has an option it is not wholly creditable to the board that it exercised this option, to fix a standard so far below the lowest requirement definitely specified in the law. It looks as if the pressure of those schools which fought the original bill in order to exempt their students from examination had been brought to bear upon the board to secure a lower standard of admission than the profession of the state of Ohio understood to be the intent of the law. One of the great difficulties we have heretofore had to meet in the last twenty years' struggle to secure higher medical education in the state of Ohio, has been the opposition of medical schools bidding for students, and it would look as if those schools which still desire ill-fitted students to begin the study of medicine in order to swell the numbers on their catalogues, had had a "pull" somewhere with the board; for where the board had an option the profession would naturally expect that option be so exercised as to hold the standard up rather than hold it down, unless, indeed, some very strong pressure were brought to bear upon the board to lower the standard.

The result of the decision of the board is that it offers a premium on not so much as going through high school even. The law requires either a college diploma or state certificate, a high school diploma, or an examination before the State Board, which examination is fixed by the board at about one-third of a high school course. A young man who desires to study medicine can therefore say, "There is no use of my even going through high school. I will go through grammar school and I will take a special course of a year and fit myself for entrance into a medical college by way of the state examination, and thus save three years." If the

board is going to maintain its reputation with the profession it must bring up those requirements to somewhere near the standard of a high school course, and we think the best way to bring the board up to a full sense of its duty and responsibility is to give as wide publicity as possible to the fact that they have professed themselves content with one-third of a high school course as a sufficient basis upon which to begin the study of medicine. As the profession realizes that fact it will doubtless express itself more and more forcibly upon the question.

L. B. TUCKERMAN.

"VISITING NURSING."

In New York, Philadelphia, Chicago and other large cities a successful experiment in nursing has recently been tried that might be adopted, with advantage, in other communities.

The system is known as "visiting nursing," and the plan is for one nurse to assume charge of several cases, visiting each one twice a day, attending to the needs of the time, and making such records of temperature, pulse, etc., as seem to be necessary.

The usual charge for such attention is ten dollars a week, and in cases where the constant care of a nurse is not necessary; where it is not convenient for the nurse to be lodged and boarded at the house, or where the expense of nursing plays an important part, the plan seems to have some commendable features.

There are many patients who need some care and attention from the hands of a trained attendant and yet do not demand, or can ill afford, her constant surveillance. To such as these, this system would prove a great blessing, not alone to the patient, but also to the physician, and we believe that if such a plan were adopted in Cleveland and other large cities it would meet with much favor.

GEO. SEELEY SMITH.

THE QUALITY OF OBSERVATION IN THE PHYSICIAN.

Successful men, whether of the professional or business world, are keen observers of men and things. It is not sufficient that the eye alone should see but the mind should also see. Where the eye only observes, the result is no more beneficial to man than it is to the brute. Any person with eyes can behold an object, but the act does not make him wiser or better. *Intelligent observation marks the nature, tendency, and relation of things.*

Sir Isaac Newton saw an apple fall from a tree and from so

simple an occurrence he evolved the law of "gravitation." Sir Isambert Brunel learned how to tunnel the river Thames by seeing the tiny ship-worm perforate the wood with its armed head, turning first in one direction, and then in another, till the arching was complete. Galileo observed a lamp oscillate in the Temple of Pisa, and it directed his attention to the pendulum to measure time, though he was fifty years in perfecting his invention. Such instances could be multiplied many times but these are sufficient to illustrate the value of intelligent observation.

There is need of this faculty in all occupations, and without it a man contends against great odds. If it be not born with him, or if it be small and feeble, it should be cultivated as other weak powers are cultivated. In numerous instances it is a gift of nature and in such cases, of course, excels. The possession of this faculty of intelligent observation by the physician is a treasure beyond value. It is the possession of this that marks the progressive man. Two persons read a book. The one skims over its pages, catching only here and there a point to make his own, the other dwells upon its thoughts, criticizes the style, sentiment, and plan, so that, when he has finished, he feels as though he had learned something. The biographies of those men who have achieved great success in life afford ample proof of the value of observation. They observed *how* some men succeed, *why* others fail.

A valuable lesson in observation may be learned from a perusal of the following simple Arabian story of the dervise: "A dervise was journeying alone in the desert, when two merchants suddenly met him. 'You have lost a camel,' said he to the merchants. 'Indeed we have,' they replied. 'Was he not blind in the right eye, and lame in the left leg?' inquired the dervise. 'He was,' replied the merchants. 'Had he not lost a front tooth?' asked the dervise. 'He had,' answered the merchants. 'And was he not loaded with honey on one side and wheat on the other?' continued the dervise. 'Most certainly he was,' they replied; 'and as you have seen him so lately, and marked him so particularly, you can, in all probability, conduct us to him.' The dervise answered, 'My friends, I have never seen your camel, nor ever heard of him but from you.' 'A pretty story, truly,' answered the merchants; 'but where are the jewels that formed a part of his burden?' 'I have neither seen your camel nor your jewels,' repeated the dervise. On this they seized his person, and forthwith hurried him before the *cadi*, where, on the strictest search, nothing could be found upon him, nor could any evidence whatever be

adduced to convict him either of falsehood or of theft. They were then about to proceed against him as a sorcerer, when the dervise, with great calmness, thus addressed the court: 'I have been much amused with your surprise, and own that there is some ground for your suspicions; but I have lived long and alone, and I find ample scope for observation even in a desert. I knew that I had crossed the track of a camel that had strayed from its owner, because I saw no marks of any human footstep on the same route; I knew that the animal was blind in one eye, because it had cropped the herbage only on one side of its path; and I perceived that it was lame from the faint impression which that particular foot had produced upon the sand; I concluded that the animal had lost one tooth, because, wherever it had grazed, a small tuft of herbage was left uninjured in the center of its bite. As to that which formed the burden of the beast, the busy ants informed me that it was corn on the one side, and the clustering flies that it was honey on the other.' "

Let us, as physicians, be sincere students and learn to observe, for the acquisition and perfecting of this quality will redound in credit to ourselves and in profit to our patients.

E. S. LAUDER.

THE PHYSICIAN'S PROFESSIONAL LIFE.

Some excellent advice was given to young physicians just about to enter upon professional life by Dr. W. W. Keen, of Philadelphia, in his speech to members of the graduating class of Rush Medical College at the last commencement exercises of that institution, June 21. The following extract is taken from the *Journal of the American Medical Association*:

"The ideal physician is a member of a learned guild. He should be above the tricks and petty jealousies of trade. True, he lives by his profession, but he who practices for gain is only a hireling and not a true shepherd of the sheep. If you would attain, therefore, to this professional ideal, you must be a constant student, keeping abreast of that scientific progress of which in your community you must be the exponent. You must not be satisfied with the knowledge which you now possess, but you must read, especially the medical journals, or you will be left behind in this day of rapid progress. You must know not only your own language, but must be familiar at least by a reading knowledge, with French and German, and if possible with other tongues. He

who knows two languages is twice the man he was when he knew only one.

"You must not only be skillful, but careful. I have made not a few mistakes in my own professional life, and in reviewing them I can see that for every one made by reason of lack of knowledge and skill two at least have been committed by haste or want of care. With all our varied instruments of precision, useful as they are, nothing can replace the watchful eye, the alert ear, the tactful finger and the logical mind which correlates the facts obtained through all these avenues of information and so reaches an exact diagnosis, institutes a correct treatment and is rewarded by a happy result.

"Be careful in your relations to your patients to deal with them conscientiously. In no other calling is the amount of service to be paid for committed absolutely to the judgment and conscience of the person who is to be paid for his services. Whether you shall make few or many visits is left to your discretion and honest judgment. Sordid motives may occasionally lead to the giving of unnecessary attention. But again it is a glory of our guild that very few physicians betray this trust, and those who do quickly lose their professional standing. Watch yourselves jealously in this and never let the greed of gain dull the fine edge of professional honesty.

"You will be the father confessor to many a penitent. Family skeletons will be unveiled to you alone. The conscientious duty of professional secrecy is given, I am proud to say, into not unworthy hands. True, physicians are sometimes too lax in the repetition of petty gossip, but the profession as a whole is worthy of the confidences so freely given. Be careful, even to reticence, of any betrayal of this trust. Better suffer misconception and unmerited blame yourselves than betray your patients.

"Be brave men. Your fathers were brave men. When pestilence stalks in the streets and contagion lurks in every chamber of illness, where have the doctors been found? Fleeing from danger with the frightened multitude? Nay, verily. If you wish to find them you must seek in the crowded tenements, in the hospitals and in the charnel houses. There you will find them cheerfully tending the sick, facing disease in the midst of its victims and seeking, even in the bodies of the dead, the knowledge that will make them masters of the plague. Witness Rush in the yellow fever of 1797, Gross in the cholera of 1832, Haffkine and Koch in the bubonic plague of the present time. War has given

us many fine examples of personal bravery, but pestilence has bred its many quiet heroes who have gone about their daily duty, simply, fearlessly, devotedly. No granite shaft, no enduring brass may mark their last resting place, but the Recording Angel has dropped a tear, blotting out their faults, and writ their names high in the roll of fame.

"In your professional relations, never forget to be charitable. The best patients you will ever have will be the grateful patient, and your hearts will often find a sincere and grateful glance better payment than any gold. In your relations with other physicians you will find many opportunities for that same brotherly kindness which is so beautiful a characteristic of our guild. Always extend to other physicians and their immediate families the courtesy of faithful attendance without pecuniary return. Avoid the petty jealousies, which, I am sorry to say, not seldom estrange physicians from each other. Always believe the best motive unless you know the worst is present. Never say an unkind word of a brother doctor when you can utter a kindly one. Try to be just even to those who are unjust to you."

CLEVELAND MEDICAL LIBRARY ASSOCIATION.

New books purchased:

Bulletin Johns Hopkins Hospital, Vols. I-X, to date.

Deaver, John B., Surgical Anatomy, 2 vols., 1900.

Deaver, John B., A Treatise on Appendicitis, 1900.

Butlin, H. T. and W. G. Spencer, Diseases of the Tongue, 1900.

Gould & Pyle, Cyclopaedia of Medicine and Surgery, 1900.

Progressive Medicine for September, 1900.

Donated. From secretaries:

Transactions of the Rocky Mountain Interstate Medical Association, 1899.

Transactions of the Vermont State Medical Society, 1899.

Transactions of the American Surgical Association, Vol. 18, 1900.

From G. H. Rowe, superintendent Boston City Hospital:

Medical and Surgical reports of the Boston City Hospital, Vols. 2 to 10.

From Dr. C. J. Aldrich:

Journal of Tuberculosis, Vol. 1.

From Dr. B. L. Millikin:

Transactions of the American Ophthalmological Association, Vol. 9, 1900. Part I.

Cleveland Medical Library Association Nurse's Bureau. Bell phone Main 2601. Cuyahoga phone M. 1390.

New nurses enrolled: Miss Emma I. Wieman, graduate Huron Street Hospital Training School; Miss Della M. Sheehan, graduate Huron Street Hospital Training School; Miss Eugenie M. Langlois, graduate Grace Hospital Training School, Detroit; Miss Mary Lyle Langlois, graduate Cleveland General Hospital Training School; Miss Jessie R. Ellinwood, graduate Pennsylvania Hospital Training School; Miss Carrie Ewers, trained one year Washington Avenue Hospital, Columbus, O.

New Books.

A MANUAL OF THE DISEASES OF THE EYE. For Students and General Practitioners. With 243 original illustrations, including 12 colored figures. By Charles H. May, M. D., Chief of Clinic and Instructor in Ophthalmology, Eye Department, College of Physicians and Surgeons, Medical Department, Columbia University, New York, William Wood & Co. 1900.

This manual may truly be called a *multum in parvo*. The author is to be congratulated in placing so much information on so few pages, as it contains but 406. It is concise, practical, and systematic. It contains the fundamental *facts* of ophthalmology and omits excessive details, lengthy accounts and discussions of theories and rare conditions, giving most of its pages to the common diseases. Thus it fulfills the general requirements of what is necessary for undergraduates and the general practitioner.

The illustrations, of which there are 243, are practical, and the twelve colored figures are good. On different occasions we have been agreeably surprised to find certain information in this manual which is entirely omitted from more pretentious works.

E. S. LAUDER.

A TEXT-BOOK OF OBSTETRICS. By Barton Cooke Hirst, M. D., Professor of Obstetrics in the University of Pennsylvania. Octavo. Philadelphia. W. B. Saunders. 1898. Cloth, \$5.00 net.

The name of the author is a guarantee sufficient that the subject is well handled. There are 653 illustrations covering the

points fully in embryology, anatomy, and the practical side of obstetrics, the majority of these illustrations being from original photographs and drawings. The various obstetric operations are fully treated, and ample directions given for the immediate repair of injuries occurring at labor. It is a good manual for practitioners and students.

L. B. TUCKERMAN.

BACTERIOLOGY AND SURGICAL TECHNIQUE FOR NURSES. By Emily M. A. Stoney. Superintendent of the Training School for Nurses, St. Anthony's Hospital, Rock Island, Ill. Author of "Practical Points in Nursing," "Practical Materia Medica for Nurses," etc. Illustrated. Philadelphia. W. B. Saunders & Co. 1900. \$1.25.

The contents of this book are considered under two main headings: Part I.—Bacteriology and Antiseptics; Part II.—Surgical Technic. The bacteriology is purposely dealt with in a very elementary way and is sufficient for the purpose it intends to fulfill. The other matters are all dealt with in a very practical manner and cannot but be of great value to the graduate nurse as well as the nurse in training. The book contains 190 pages, the print is good and is on good paper.

The final chapter is devoted to signs of death and the necessary preparations for an autopsy, especially if it be conducted in private practice.

E. S. LAUDER.

AN AMERICAN TEXT BOOK OF PHYSIOLOGY. By Henry P. Bowditch, M. D.; John G. Curtis, M. D.; Henry H. Donaldson, Ph. D.; W. H. Howell, Ph. D., M. D.; Frederick S. Lee, Ph. D.; Warren P. Lombard, M. D.; Graham Lusk, Ph. D., F. R. S. (Edin.); W. T. Porter, M. D.; Edward T. Reichert, M. D.; Henry Sewall, Ph. D., M. D. Edited by William H. Howell, Ph. D., M. D., Professor of Physiology in the Johns Hopkins University, Baltimore, Md. Second Edition, Revised. Vol. I. Blood, Lymph, and Circulation; Secretion, Digestion and Nutrition; Respiration and Animal Heat; Chemistry of the Body. Philadelphia. W. B. Saunders & Co. 1900. \$3.00.

The contributions to this volume are by men who are well qualified to do their work. The fact that experimental physiology has been making very great progress renders it almost impossible for any one author to keep thoroughly informed on all topics. Hence the advantage of several contributors, each one of whom is enabled to more thoroughly cover the literature pertaining to the subject assigned him.

A valuable addition in this volume is the references to literature that has been made use of by the contributor. This may not

be of value to the undergraduate, but by the teacher it will be appreciated. The work is certainly a valuable and comprehensive one of reference for physicians and pathologists as well as all students of physiology. E. S. LAUDER.

DISEASES OF THE TONGUE. By Henry T. Butlin, F. R. C. S., D. C. L. Surgeon to St. Bartholomew's Hospital and Professor of Surgery and Pathology at the Royal College of Surgeons; and Walter G. Spencer, M. S., M. D., F. R. C. S., Surgeon to Westminster Hospital, and in charge of the department of Diseases of the Nose and Throat. Octavo, pp. 476. Extra cloth, \$3.25 net. Cassell & Co., Lim., 7-9 W. 18th St., New York, Publishers. For sale by The Helman-Taylor Co., Euclid Ave., Cleveland.

This book of 475 pages is devoted to a thorough consideration of the tongue and its diseases. Dr. Butlin being a member of the staff of St. Bartholomew's Hospital, had an invaluable amount of clinical material to draw from, and together with the assistance of Dr. Spencer and the manuscript notes of Sir James Paget, we do not wonder that it is one of the foremost works of its kind.

The encyclopedic method has been to some extent followed and each disease is treated in a most systematic manner. It is beautifully illustrated with eight chromo-lithographs and thirty-six engravings. It is certainly a comprehensive work, and we freely give it our endorsement.

A MANUAL OF PERSONAL HYGIENE. Edited by Walter L. Pyle, A. M., M. D., Assistant Surgeon to Wills Eye Hospital, Philadelphia; Fellow of the American Academy of Medicine; Former Editor of the *International Medical Magazine*, etc. Contributors: J. W. Courtney, M. D.; George Howard Fox, M. D.; E. Fletcher Ingals, M. D.; Walter L. Pyle, M. D.; B. Alexander Randall, M. D.; G. N. Stewart, M. D. (Edin.); Charles G. Stockton, M. D. Illustrated. Philadelphia. W. B. Saunders & Co. 1900.

In this book we have a fund of information which may be read, and appreciated, by the layman as well as the physician. Each contributor has avoided, in so far as possible, the use of technical phraseology, but this could not be entirely avoided when dealing with a branch of the science of medicine.

The contents of the book are considered under the headings and by the contributors as follows: Hygiene of the Digestive Apparatus, by Charles G. Stockton, M. D.; Hygiene of the Skin and Its Appendages, by George Howard Fox, M. D.; Hygiene

of the Vocal and Respiratory Apparatus, by E. Fletcher Ingals, M. D.; Hygiene of the Ear, by B. Alex. Randall, M. D.; Hygiene of the Eye, by Walter L. Pyle, M. D.; Hygiene of the Brain and Nervous System, by J. W. Courtney, M. D.; Physical Exercise, by G. N. Stewart, M. D. The subjects treated and the names of the respective contributors afford ample evidence of the value of the work.

E. S. LAUDER.

NERVOUS AND MENTAL DISEASES. A Manual for Students and Practitioners. By Charles S. Potts, M. D., Instructor in Nervous Diseases, University of Pennsylvania. Assistant Neurologist to the University Hospital, Philadelphia. Consulting Physician to the Hospital for Insane, of Atlantic City, N. J. Edited by Bern B. Gallaudet, M. D. Demonstrator of Anatomy and Instructor in Surgery, College of Physicians and Surgeons, Columbia University, New York. Visiting Surgeon, Bellevue Hospital, New York. Illustrated with eighty-eight engravings. Lea Brothers & Co., Philadelphia and New York.

This book is one of a series of manuals and contains 455 pages. It does not pretend to deal with the subject of nervous and mental diseases in a full, comprehensive manner, but simply to give the essentials of the subject. It is intended chiefly for the undergraduate, but can also be used by the practitioner as an introductory to the study of the subject treated. The arrangement of the work is good. In the introductory chapters the histology and general pathology of the nervous system are considered. Then follows, in separate chapters, general symptomatology and methods of examination, general therapeutics, symptomatic disorders and several chapters on diseases of the peripheral, cranial and spinal nerves, etc. The work also contains a brief reference to mental diseases.

To the student who has not the time to supplement his lectures by the perusal of a more exhaustive treatise, we can recommend this work.

E. S. LAUDER.

Notes and Comments.

Dr. Geo. Seeley Smith has removed to his new home at 75 Cornell street.

Dr. A. S. Henry has removed from 1166 Woodland avenue to corner of Quincy and Florence streets.

Dr. Robert Pollock has been confined to his home, 558 Hough avenue, for several weeks through illness.

Dr. R. H. Martin, of 389 Cedar avenue, is able to move about again after being in bed three months with rheumatism.

Dr. H. E. York, of Fairport, was in the city on October 10th. The doctor is Republican nominee for coroner of Lake county.

Dr. and Mrs. Charles F. Hoover have returned from their wedding tour to Scotland. They will reside at 835 Case avenue.

Dr. John M. Ingersoll was married on 18th October to Miss Catherine Leslie Garvin, of Franklin, Pa. They will reside at 133 Handy street.

Dr. and Mrs. J. F. Hobson were south during October. They spent a week at Asheville, N. C. The doctor attended the sessions of the Mississippi Valley Medical Association.

Dr. Geo. W. Crile presented a paper at the meeting of the Mississippi Valley Medical Association. The title of the paper was "Technique for Removal of Tumors of the Neck."

Dr. and Mrs. C. B. Parker spent a week at Asheville, N. C., during October. The doctor attended the sessions of the Mississippi Valley Medical Association, which met there on the 9th, 10th and 11th of October.

Dr. C. A. Hamann was married on 31st October to Miss Ella Ampt, of Wyoming, O. On their return from their wedding trip to the Bermudas, Dr. and Mrs. Hamann will reside at 744 Prospect street, corner of Sterling avenue.

Sir Michael Foster, the English physiologist and professor in the University of Cambridge, is to deliver the annual Lane course of ten lectures at Cooper Medical College, San Francisco. The subject which he has chosen is the "History of Physiology." The profession of San Francisco is to be congratulated upon the opportunity to hear this distinguished man.

In Children and Very Nervous Patients it is always best to operate in the morning, as this avoids weakness from hunger and the effects of a long and nervous wait. Besides, if these patients have taken anything but whey or some predigested food in the morning, the digestion will, through fear, have been quite suspended, and vomiting will certainly take place.

It is Well to Remember that it is practically impossible to asepticize hair. Hence operations or the treatment of wounds upon hairy parts, and especially the scalp, should be preceded by the shaving of an ample area. Patients often object to the removal of much hair from the scalp, but a little talk about the dangers of gangrene of this part will usually overcome their objection.

Picrotoxin is said to be a powerful antidote against chloral narcosis.—*Med. Summary.*

The American Association of Obstetricians and Gynecologists has selected Cleveland as its place of meeting in 1901.

Tests prove that any other portion of the gastro-intestinal canal will absorb strychnine more rapidly than the stomach.—*Med. Summary.*

Hyoscyamus and the monobromate of camphor are good remedies in the treatment of certain forms of dysmenorrhea.—*Med. Summary.*

It is Stated that enveloping the limb for one night in flowers of sulphur will cure sciatica. The urine next morning smells strongly of sulphuretted hydrogen.—*Med. Summary.*

In the Treatment of Lead Colic the use of sulphate of atropine with iodide of potassium is advised as a rapid and effective combination.—*Med. Summary.*

The Hungarian Government has issued a decree regarding ritual circumcision, placing the operation under medical supervision, and insuring that it shall be performed under the rules of surgical antisepsis.—*Med. Times.*

Surgical Needles will remain bright and sharp if kept in a saturated solution of washing soda. If rusty, they should be well rubbed until bright, with emery powder, then washed off with alcohol and placed in the soda solution.

Never Place a Suspicious Wound in a Dry Dressing. The latter is the best in an aseptic wound, but you must know that it is aseptic before using a dressing that would help retain an unhealthy secretion in case one should appear.

The Will of the Late Jonas G. Clark, of Worcester, Mass., who founded Clark University in 1889, was filed in the Probate Court of that city the other day. The entire estate is left to the university, provided the people of the city raise a fund of \$500,000.—*Med. Age.*

The Worst Famines of Modern Times were the famine in Ireland, in 1846-7, in which 1,000,000 people perished; the Indian famine of 1866, which claimed 1,450,000 victims; the Indian famine of 1877, in which 500,000 people perished; and the great famine in China, in 1878, in which 9,500,000 died.

Nitroglycerin, according to Marshall (*Lancet*, November 4, 1899), is serviceable only in diseases connected with actual or relative spasm of unstriated muscular fibre. In pneumonia and other respiratory diseases there seems to be no rational basis for its use.—*Med. Times*.

Amputation of the Cervix may be useful in certain conditions, but certainly not in cancer. In this disease it is unjustifiable, for it does not remove the disease and it does hasten the general involvement, and an imperfect operation for cancer is a blot upon surgery.

Sore Nipples are not unfrequently caused by excessive friction in the care given during the pregnancy for the purpose of hardening the nipple. Astringent solutions properly applied are preventive. During lactation avoid excessive nursing and, above all, see that the nipple is cleansed and thoroughly dried after each application of the child.—*Med. Summary*.

If Compelled to Amputate through the upper part of the arm or leg in a child, warn the parents that in all probabilities a conical stump will result, probably requiring surgical attention in later years. The humerus and the bones in the leg are developed to a great extent from their upper epiphyses, hence a conical stump must usually be expected, and the surgeon should protect himself by a timely warning.

In the Contraction of the Oesophagus that is sometimes seen in hysterical women, it is well to remember that there is sometimes a source of local irritation which appears to favor the occurrence of this condition. Ears plugged with wax, large tonsils and adenoids, nasal growth, may all be responsible and should be looked for. The mental effect of slight surgical procedures, when really indicated, is a great advantage.—*International Jour. of Surg.*

The Exhibit of the Trans-Siberian Railroad at Paris, says an exchange, is attracting much attention, as comfort and hygiene have both been studied in the trains. The walls are smooth wood or tiles; the seats are covered with real or artificial leather; there are shower baths; appliances for cooling the air; gymnastic apparatus; cigar lighters; boiled water in the coolers; and a sanitary official on each train who is a trained nurse and barber. The draperies are reduced to the minimum, and an automatic perfume is set in action as the door of the water-closet is closed.

The Open-Air Marine Treatment for Consumption has been practiced, says an English weekly journal, with success for several years in Southern Brittany. The Pen-Bron Hospital is famous for its cures. It is used mainly by working people, the cost of maintenance being defrayed by the local authorities by whom they are sent. Its success has led to the creation of a magnificent private institution at La Baule, a few miles away, for well-to-do patients who can afford to pay for treatment. The new hospital, which is built of granite, looks out upon the sea from beautiful grounds, surrounded by evergreen pine forests. It has been fitted out on a luxurious scale, with a special system of drainage. The hydro-pathic department comprises hot and sea water baths, seaweed baths, electric brine baths, and hot-air baths, together with vapor, douche, rain, shower, and medicated baths.—*Med. Age.*

Atropin as a Means of Diagnosis in Persistent Headache. Landman (*Jour. Am. Med. Ass.*) says that we know that some headaches are relieved or even cured by the use of glasses, which remove the strain from the ciliary muscles. The analysis of a number of cases which have come for relief show that atropin is effective in dispelling the pain in just these cases. The headaches most frequently produced by ocular defects are situated in the following regions: Supraciliary, occipital, occipitofrontal, vertex and temporal. Especial attention is called to one variety when the pain is felt on the top of the head, having an area about the size of a silver dollar, circumscribed and associated with tenderness of the scalp. This is almost invariably due to eye-strain. Dizziness is often caused by the same condition. To obtain the result from the use of atropin it must be pushed to complete suspension of accommodation. A solution of $\frac{1}{4}$ grain of the sulphate of atropia to two drams of water is prescribed, with directions to drop three drops in the eye, three times a day, until ten instillations have been made. When the patient returns after the use of the atropia we find that the headache has disappeared. The prognosis for cure with properly selected glasses is good.

The Wiles of the Patent Medicine Man. Representative Otey was once asked how his picture came to appear among the great number of noted statesmen and public men whose lives had been saved by the use of some sort of a nerve tonic.

"It was this way," said Otey. "My wife was induced to buy a bottle of the stuff, and just to satisfy her I consented to take some of it. There was nothing the matter with me, but she had

read an advertisement somewhere, and fearing that my health was not as good as it might be, she bought the medicine.

"‘I think that stuff did you good,’ she said to me one day.

"‘I guess it did,’ I answered, ‘but don’t buy any more of it.’ Some little while after this Mrs. Otey mentioned to some of the neighbors that I had taken the medicine and thought highly of it. So the matter got talked about, I suppose, and a few days later Mrs. Otey got a letter from some one asking her what I thought of the infernal compound.

"Without suspecting the writer of being an agent of the medicine company my wife wrote a brief reply merely stating that I had taken a bottle of the liquid and found its effects beneficial. Within ten days my picture was appearing in all the newspapers of the country as a noted member of Congress, whose system had been toned up and his life prolonged by the use of Dr. Somebody’s mixture.

"Big posters bearing my likeness were also put out, and, although I was indignant, I did not see what I could do, for, you see, they had really secured a letter from my wife."—*New York Morning Telegraph*.

Aqueous Extract of Suprarenal Gland. Somers (*Merck’s Archives*) says that the principal objection to the use of suprarenal extract is the difficulty of obtaining a stable solution. As ordinarily prepared by macerating ten grains of the desiccated extract in one dram of sterile water for ten minutes a clear solution of light brown color is secured which will resist putrefaction, at ordinary temperatures, from twenty-four to forty-eight hours. Glycerin in from 10 to 25 per cent. will prevent putrefaction for several days. The activity of the adrenal is not impaired by boiling and may be repeatedly made sterile in this manner. The following formula used by Ingals will remain undecomposed from three to five weeks:

Adrenal	gr.	15
Boric acid	gr.	4
Cinnamon water	dr.	1
Camphor water (hot).....	dr.	2
Boiling water q. s. ad.....	oz.	1½

M.: Macerate four hours. Filter.

When it is desired to control inflammation or bleeding and produce anesthesia of the mucous membrane, and as a valuable local application in hay-fever, the following formula will be productive often of marvelous results:

Adrenal	gr. 20
Phenic acid	gr. 2
Eucaïne B.	gr. 5
Distilled water	dr. 2

M.: Macerate ten minutes. Filter.

This solution is permanent; will not decompose nor lose its physiological activity for several months.

Tumor Albus. The common synonyms of this term, says F. E. Peckham (*Med. Rec.*, August 25, 1900) are white swelling and tuberculosis of the knee-joint. The important early symptoms are heat, swelling, tenderness, distention, bogginess in the absence of fluid, depression of the patella by swelling of tissues about it. When the joint is opened this is found to be due to the accumulation of a peculiar gelatinous material within the cavity whether fluid is present or not. The inner condyle of the femur is apt to be the more involved. This produces a condition simulating knock-knee, if at all marked. Lameness next appears and may at first be intermittent. With increasing irritability the flexor muscles become slowly contracted and then flexion and subluxation ensue and are characteristic deformities. Muscular atrophy distal and proximal to the joint becomes manifest. Locally temperature is appreciably elevated. By stimulation of the epiphyseal growth sometimes actual lengthening occurs for a time. Pain appears early and becomes greater and greater if treatment is delayed. Then appear anxiety, loss of flesh and strength, fever, anorexia, etc. This important disease is to be differentiated from synovitis, rheumatism, rheumatoid arthritis and hysterical joints. Synovitis, especially if the body resistance is lowered, is difficult to eliminate, but the patella here floats on fluid, is not surrounded nor covered by a boggy mass and hence strikes the femur with a distinct click. Motion is not much interfered with. Atrophy is absent. Acute rheumatism has a sudden onset with fever and more than one joint may be affected. Chronic rheumatism is clinically sometimes impossible to differentiate. In rheumatoid arthritis the bony spindle-form joint enlargement and the distinct bony crepitus due to erosion of the joint surfaces and the presence of the disease in several joints make up its salient features. Hysterical joints may be recognized only after watching the case. The treatment comprises conservative fixation, rest and protection, with tonics and fresh air, radical opening and scraping of the joint excision in bad cases, amputation as a preservative of life.—*Med. News.*

Growing Pains. Rheumatism in children is more often met with than was formerly supposed. It is true that in childhood the joints are less frequently involved than in maturer years but the liability of endocardial affections is correspondingly greater. We are all familiar, from our tenderest years, with the term "growing pains," and remember distinctly the amused indifference with which the mention of our muscular pains of that description were greeted. It is now conceded that the leg aches and pains in the arms of the rapidly-growing anemic boy or girl before or about the age of puberty, usually ascribed to over rapid growth, are in reality due to rheumatic disposition, and it is maintained that closer investigation will in the majority of such cases reveal that origin. The recognition of this fact is immensely important as the institution of prophylaxis at an early stage in endocarditis is attended with profound significance upon the later years.—*Physician and Surgeon.*

Be Energetic as well as Earnest. Just why a man who knows himself to be constitutionally lazy should enter the practice of medicine, we have never been able to understand says the *Medical World*. Long before he earns his diploma he must have understood that the life before him is one of drudgery and toil. Yet he begins practice, but failing to possess sufficient momentum to handle the fastest nerve destroying occupation known, he becomes a drag upon himself, and a poor excuse for a doctor to those misguided persons who employ him through necessity or choice. We know of no profession or occupation which requires more vim and energy than the practice of medicine. We know many brainy, well-qualified men who have failed to possess the necessary "push" to carry the load. It has always seemed to us that even if a man lack natural energy, he might arouse sufficient artificial voltage to carry him through.

A successful commercial company in Ohio issues regularly a "paper devoted to the interests of their patrons, themselves and their employes." A recent issue contained the following adapted aphorisms, which we are certain can be absorbed and acted upon by a number of practitioners of medicine with marked benefit to themselves and to their patients:

"The way to dig a town out of a blizzard is for every man to sweep his own door step. The way to meet our monthly quota is for every man to meet his own. The way to beat it on the month is to beat it every day. The way to do a day's work is to

start right, plug hard and hang on. If the few happy-go-lucky men on our force who think life is too short to bother about doing things right every time, would realize that it is too short to do anything else, we would never miss a quota of sales. If this fits you, put it on."

Crudely expressed, with greater truth than poetry, grammar or diction, the principles outlined above are heartily commended to the many unfortunate doctors who think themselves crust with indolence. Too many practitioners are slow to respond to an "emergency" (?) call in the mistaken belief that their delay will impress the family with the vast extent of their practice, which forbids immediate attention to many. Is this really the meaning they intend to convey? If the laity learn that you do not respond to calls promptly, as a rule, they will rapidly flock to some other practitioner. Their aims are wholly selfish; yours only partially so. They want immediate attention for their real or fancied ills. Your delay will not appall them; it will only disgust them. In fact, they will often become disgusted if you are really in stern battle with death itself at the bedside of some other patient, and fail to arrive to incise a boil for them at the precise moment they expect you. You may be lazily content in the knowledge that the family have been perhaps unduly excited anyhow; or that there is no other physician within reach upon whom they may call; but what about your duty? Whether real or fancied, when their ills suggest the summoning of a physician, the average patient begins to feel worse immediately and progressively until the arrival of their medical counsellor. It is certain that they will ferret out your private habits if they once suspect dalliance with a call after they have condescended to call you. Exposure of such practices is fatal in any community. Those who have really needed you least will howl loudest and their wail will influence others.

This very habit is responsible for the decadence of many an older and experienced practitioner's practice in favor of the ascendancy of a younger and more energetic man. Occasionally the laity will excuse much in a medical man's habits, but never will they condone evident laziness.

The young man who begins in indolence will end in failure in the practice of medicine. The older man who acquires the habit will fall in the same ditch. Be thorough; be energetic; be prompt; nothing else will do.—*Charlotte Medical Journal*.

Counter-Irritants.

The Maid of the Period.

In vain does the penniless youth sing of love,
In a falsetto voice sweet and clear,
While the rich old man may chatter his vows
With a falsetto teeth—and she'll hear.

Knew Her Ways.

"Did you hear what Whimpton's little boy said when they showed him the twins?"

"No; what was it?"

"He said: 'There, mamma's been gettin' bargains again.'"—*Collier's Weekly*.

Novel Therapeutics.

At Harlem Hospital recently, says the *Philadelphia Medical Journal*, John O'Connor became unconscious and rigid as in a cataleptic fit. The usual remedies failed, and original and heroic measures were employed by the physicians, who thought John was shamming, but he withstood pinching and tortures without a groan. Casey, a porter, was then placed in a corner and told to sing an Irish song. "'Tis loike the home in Ireland," said O'Connor, and dropped back more rigid than ever. Casey then stepped to the cot and shouted: "You're an Orangeman. You're worse than that. You're an A. P. A." O'Connor leaped from his bed and roared: "The man that says it is a liar. I can lick him with one hand. Show me him." Casey made his escape. The final diagnosis was delirium tremens.

Cheaper than Hiring a Car.

The following witticism, clipped from a New York weekly, is going the rounds of the medical press, probably because certain jewels of truth lay hidden between the lines:

Scene 1.—Stranger (midnight): "I should like you to go to No. 999 Suburb avenue to see my wife."

Doctor: "All right; I'll be ready as soon as I can get my carriage. Wait and you can ride with me."

Scene 2.—Doctor (two hours later): "I can see nothing the matter with your wife except that she seems pretty mad at being waked up."

Stranger: "Remarkable recovery, I must say. Here's your dollar."

Scene 3.—Wife (five minutes later): "Why in creation did you bring a doctor to see me?"

Husband: "The street cars had stopped running and it was cheaper than hiring a cab."

Prudent Forethought.

"Maria, where are the children?"

"In the other room."

"Well, send them out of the house. I am going to pull that porous plaster off my back."

"Have you always been in such poor circumstances, my man?" "No, mum. I was once well off, but my wife deserted me."

"What is a skeptic, pa?"

"Well, the most hopeless kind of skeptic is a woman who has lost her faith in doctors."

The Healer: "Your greatest need, madame, is to place yourself in harmony with the universe."

The Willing One: "But how can that be done?"

"For three dollars a treatment."—*Life*.

"You ride a horseless carriage quite a lot, don't you?" asked the doctor.

"Yes," replied the patient.

"I thought so. You are automobilious."

Patient: Why do you watch the thermometer on the wall so closely?

Nurse: Because the doctor said if the temperature rises I should give you the quinine.

Singleton: Dr. Pellet is certainly the most absent-minded man ever I saw.

Wederly: Is that so?

Singleton: Yes; he was married last week, and during the ceremony when he should have placed the ring on the bride's finger he actually felt her pulse and asked her to put out her tongue.—*Chicago News*.

A Southern woman tells about dining in Boston once, when next her sat a homely little old gentleman, who wanted to know how she passed the time in the country with her old father. "Well, we read." "What do you read?" "Chiefly 'The Autocrat at the Breakfast Table.'" "Don't you get tired of it?" "Oh, no. When we get to the end, we simply turn back to the beginning." The old gentleman chuckled, and made a remark implying that the "Autocrat" was no great thing among books; and the lady was rather surprised at his disparaging air. After dinner she demanded of her hostess the name of the very unappreciative old gentleman, and was told that it was Dr. Holmes.—*Boston Transcript*.

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Original Articles.

A CASE OF CRETINISM AND THYROID EXTRACT.*

BY J. B. MCGEE, M. D.

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The positive power of thyroid extract in a wide range of diseases appears assured, while in certain conditions, as cretinism and myxedema, its therapeutic action seems almost specific. There is no exaggeration in the statement that it has proved one of our greatest aids, and while perhaps in some cases its worth may lie within limited lines, in cretinism it is invaluable, and practically our only remedial reliance. Given first empirically, its status seems settled on a scientific basis, as it is assumed to act by supplying the glandular element lacking or absent in these cases, and to which cause the lack of nutrition and delayed development are doubtless due. The entire organism responds to the action of this important physiological stimulus, and under its use the retarded cell activity is increased and these hitherto hopeless and helpless cases are restored to comparative health. Without noting the various theories as to the functions of the thyroid, it is sufficient to state that its loss is always attended by deficient mental and physical development, and is recognized as the essential condition in cretinism whether endemic or sporadic. The cases comprised in this class are usually divided into those associated with an absence, perhaps congenital, of the gland, those in which it has atrophied, and those in which it coexists with goitre. The disease, as is well known, is relatively rare with us, and a case at present under treatment, and in which

* Presented at the Ohio State Pediatric Society in Columbus, 8th May, 1900.

the symptoms were quite fairly defined, is of additional interest from the fact that the condition followed an attack of typhoid fever, to which it very probably bore a casual relation. Fagge first noted the condition as following an acute disease, a probable attack of measles in a girl of 8 years, previously healthy, and cases have been since reported in which it has been ascribed to an atrophy of the gland following a febrile attack. As regards the form of administration of the drug, the tablets prepared by reputable makers doubtless vary but little in value. Iodine is said to be the active agent of the gland existing in the form of iodothyron, and glands vary in the amount of the principle contained. It is preferred by some as disagreeable effects are less liable to follow than when the gland is employed, and it is said to be equally efficient. It has recently been asserted, however, that another active principle also exists, and that both are essential to produce the special effects of the entire gland. My own experience has been limited to the dried gland, and it is probably best given, at least at the outset, in small rather than large doses to avoid unpleasant symptoms which are apt to follow, although it is said that arsenic given in small doses will obviate these disagreeable effects.

Lizzie L. was treated by me for typhoid fever during the spring of 1895, when she was nearly 3 years of age, and a large, well developed child. Her parents are Scotch, and both healthy, although the mother has had a goitre of moderate size for several years. The other children, of whom there are several, are healthy, and this is said to be the usual case when the condition occurs sporadically. I lost sight of the little girl for some years, but one year ago, when called to see another member of the family noticed the child's appearance, and on inquiry ascertained that she had not grown any from the time of her attack of typhoid, four years before. Her appearance suggested cretinism, as the hair was dry and brashy, the skin harsh, the general appearance squatty, the lips protruding, the tongue enlarged, and the mental condition dull and apathetic. She would sit quietly for hours, take little interest in her surroundings, and showed no inclination for childish sports. The first teeth had been erupted before the febrile attack, and were sound. She was at this time 7 years old, and the diagnosis was based upon the general appearance and cessation of growth, as well as the absence of the thyroid, harsh and dry hair and skin, the protuberant abdomen and prominent lips, the hypertrophied tongue, and the intellectual dullness. Doctors Belt, Corlett and Hamann, who kindly saw the case with me, coincided in



BEFORE BEGINNING TREATMENT.



ONE YEAR AFTER BEGINNING TREATMENT.

the diagnosis. She was given a five grain tablet of thyroid extract, containing two grains of the desiccated gland, three times a day. This amount, however, caused headache, palpitation and general distress, but no urticaria or glycosuria was noticed. When the dose was reduced to one-half tablet three times a day no depression nor disagreeable results followed, and although this dose has not been increased, improvement has steadily continued. The skin and hair first responded to the action of the remedy, the hair becoming soft and silky and the skin smooth and clear; the dull look was replaced by one of brightness, the prominent abdomen became less evident, although a slight lordosis still exists. When first seen the height was $32\frac{1}{2}$ inches, and now, after a year of treatment, it is nearly 39 inches, while her weight has increased 10 pounds. The body is more symmetrical, and the mental improvement has been so decided that she is about to attend school, which is certainly remarkable when we remember that for the four years preceding she had been practically at a standstill, mentally and physically.

Attention has been called to the fact that with the rapid growth under thyroid treatment, the leg bones are apt to bend when used to any great extent, and for this reason it has been recommended to keep the patient in bed as much as possible. In this case no such result followed, and the child was allowed to move about as freely as she wished. Of course we are aware that the use of the gland or its principle must be continued at intervals throughout life, as it is a physiologic essential, but it is certainly most satisfactory to feel that we have an agent capable of producing and maintaining so remarkable a restoration of growth and activity.

Symposium on Appendicitis.

PAPERS PRESENTED AT THE MEETINGS OF THE CUYAHOGA
COUNTY MEDICAL SOCIETY, IN CLEVELAND, ON
THE EVENINGS OF THE 4TH AND 18TH
OF OCTOBER, 1900.

ETIOLOGY OF APPENDICITIS.

BY GUY H. FITZGERALD, M. D.

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The predisposing causes of appendicitis are many. The organ is functionless so far as we know, and being rudimentary it is less resistant to infections and less able to repair damage when done. It is a closed tube with a common opening for the entrance and egress of foreign bodies and hence the drainage at times must be faulty. This is especially true when the organ hangs dependant or when bent or twisted upon itself. The blood supply through the appendicular artery may be partially or completely shut off by torsion or kinking of the organ and by twists of its mesentery. Pressure from tumors and embolism, too, may obstruct the circulation.

The large amount of lymphoid tissue in the appendix must prove an important factor. This tissue, similar in structure to that of the tonsil, has led some to assume that the appendix is subject to similar disorders and on this basis account for recurring attacks of the disease.

A preceding attack of some gastro-intestinal trouble is often a determining factor. A catarrhal process involving the musoca of the caecum may reach the appendix by extension. Typhoid ulceration may occur in the glands of the appendix and tuberculosis may be present when the neighboring structures are affected or when the tubercular focus is in some distant organ. Pus tubes and pelvic disease in general may reach the appendix, especially when it extends down into the pelvis. Actinomyces has been demonstrated as one of the causes of appendicitis. As predisposing, if not direct, causes of appendicitis dysentery, lead poisoning, influenza and rheumatism may be mentioned. The latter two diseases have been supposed to affect the lymphoid tissue in particular. The disease is most common between the ages of 15 and 30 and it is about twice as common in males as in females. Traumatism may be mentioned as one of the factors and a severe strain in lifting heavy loads, jolts, etc., are quite often assigned as a cause. Rare cases are those in which new growths, both benign

and malignant, hydatids, etc., occlude the lumen or interfere with the blood supply and thus cause the disease. Foreign bodies bear a minor part in appendicitis. Seeds of various kind, intestinal parasites, spicules of bone, and other foreign bodies may enter the lumen, act as irritants and become exciting causes of appendicitis, but this is an infrequent occurrence. Calculi are often found in the appendix. They may sometimes be forced in from the caecum, but more often they are found in the appendix. During a catarrhal inflammation of the mucosa an exudate is thrown off and this mixed with granular debris, desquamated cells has lime salts, cholesterine and other matter deposited upon it and thus a calculus is formed. The peristalsis of the organ in attempts to dislodge it moulds it into the form usually found. Once formed, a calculus may prove an important factor in further trouble. It may act as an irritant to the mucosa and by pressure lower its vitality so that the bacteria, already present, have a media favorable for growth.

As a sequel to ulceration of the mucosa there often results a stenosis due to the formation of scar tissue. This narrowed area may interfere with drainage of the organ and when it does so becomes an important factor. This is especially true when the contracted area is near the base or in the body of the organ. Healed ulcers on one side by contracting may start a kinking of the appendix and thus interfere with its free drainage. Anything which interferes with free drainage will predispose to if not cause appendicitis. When the tube is closed the bacteria present seem to assume a greater virulence. Kinks or twists due to a long or short mesentery, an appendix which hangs low in the pelvis or one which is bent up behind the colon so that the contents of the caecum may interfere by pressure are all important.

The bacillus coli communis is the most common organism in appendicitis. Associated with it may be a number of others, especially staphylococci and streptococci. Rarer organisms are the pyocyanous, prodigeosis, subtilis. The coli communis alone, however, may be found in those severe cases called "fulminating" appendicitis.

A study of 42 cases in the surgical service of Drs. Bunts and Lower shows the following facts which may have a bearing on the etiology: There were 26 males; 16 females. Average male age, 25.6; female, 21.5 years. The oldest patient was 66, the youngest 6, both females. In twenty-one cases a history of some preceding gastro-intestinal disturbance was elicited. Three patients had had rheumatic attacks during the preceding year. In

two cases the attack seemed to follow closely a mild form of influenza. Eight patients had had typhoid, but in none was it recent. In eighteen cases there was constipation and four had been troubled with diarrhœa. Two patients had received an injury which was followed promptly by appendicitis. A little girl of six had been kicked in the abdomen by a playmate and a woman 36 had fallen down a cellarway and landed on the corner of a box which struck her in the right iliac region. Three patients attributed the disease to heavy strains in lifting. In eight cases nothing could be adduced from the history which would have any bearing on the causation. Thirteen appendices were behind the colon and seventeen were in the pelvis. Of the latter, one was across the median line on the left side and was adherent to and ruptured into the bladder. In four cases there was a distinct kinking and fifteen specimens showed areas of stenosis. Two specimens were mere pus sacs. Thirteen cases had a short mesentery, while in twelve it was longer than usual. Tuberculosis was demonstrated in two cases, twice in appendices in contact with tuberculous tubes and once in a patient who had a tubercular process in the left apex. Calculi or concretions were found in twenty-seven specimens and one appendix contained a seed.

Inoculations were made from the peritoneal surface of the appendix in all cases. In some inoculations were made from the interior also. The inoculations from the peritoneal surface of those appendices which were not gangrenous or rupture were sterile. Of the pus cases, twenty-four in number, one proved sterile. This was an old case on its way to recovery. Twenty-three cases showed the presence of the bacillus coli communis. In six cases it was associated with staphylococci, five times with aureus and once with citreus; no streptococci were found. The most severe cases produced only coli when inoculated on agar.

DIAGNOSIS OF APPENDICITIS.

BY CHARLES B. PARKER, M. D.

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There are no pathognomonic signs of appendicitis, nor is the presence of any one sign alone sufficient to make a certain diagnosis. In most cases the diagnosis may be made upon the following symptoms being present:

1. Sudden onset in one previously well with or without vomiting.

2. "Board-like" condition of the right abdominal wall.
3. Pain at the McBurney point.

First. The sudden onset in one previously well is characteristic of appendicitis.

This sudden onset in one perfectly well is most marked in first attacks, but is also present (its suddenness is marked) in many cases of recurring appendicitis. It is an important differential sign as we shall see further on.

Second. The board-like condition of the abdomen. This is present and localized on the right side, or it may extend over the entire abdomen in severe fulminating cases. It is to be distinguished from a tumor or other condition within the abdomen. It appears early, before any tumor has formed, and it persists. It cannot easily be mistaken, and its absence casts doubt upon the presence of any inflammation of the vermiform appendix.

Third. Pain. While pain varies greatly in degree in various subjects, it is usually present. The patient is not always able to locate the pain in the appendicular region in the beginning of the attack, but in the great majority of cases the pain is accentuated at the McBurney point.* Sooner or later the fleeting pains felt at various parts of the abdomen become centered at this point. Exceptions certainly do occur. I recall the case of a patient where the pain continued acute in the region of the gall bladder and was never marked in the appendiceal area except upon pressure. I recall the case also of a physician who never clearly located the pain in his right groin though he had repeated recurrent attacks. Pain may also be accentuated by palpation.

The amount of tenderness usually corresponds in some measure to the degree of inflammation. If the tenderness is markedly increased it may indicate the formation of pus, or even the beginning of gangrene. Again, where the tenderness is markedly increased with symptoms of collapse and vomiting, it may indicate perforation and general peritonitis. Whenever the tenderness is decreased during the course of an attack, it may be due to the discharge of a concretion from the appendix, or it may be caused by the free evacuation of the bowels, or, again, it may indicate the most complete and extensive sepsis. The cessation of pain, therefore, is by no means a favorable symptom, and when it occurs with other evidences of blood poisoning, it should be regarded as a most unfavorable diagnostic sign. When the cessation of pain is

*A point midway of a line drawn from the umbilicus to the right anterior superior spine.

complete and abrupt, it indicates extensive gangrene of the appendix. When the pain occurs at other than the typical point, it is due to the fact that the appendix lies out of its usual position, or is very long, or the perforation is at or near its apex and the abscess formed beyond. Thus pain on the left side in appendicitis usually indicates that the appendix extends into the pelvis, and this is rendered more certain if vesical symptoms are present. When the pain occurs in the hepatic region, the appendix usually lies forward under the colon with a distal perforation and an abscess extending up under the liver even under the renal fat. The pain, then, indicates the location of the inflammation and its extent. When the pain is excessive it usually indicates pus formation. To determine the presence of the diagnostic points mentioned we make use of the following methods of examination:

1. History. The previous history of the case, including a minute account of any deviations from a perfect state of health, must be carefully noted. This account should be given in the patient's own words with as little questioning as possible and carefully noted, with special reference to suddenness of onset and as to there having been previous attacks. A side remark of the patient may be of great importance.

2. Palpation. This means of diagnosis is becoming generally employed, and various suggestions are put forth as to how it should be done. It is well, having the patient in the recumbent position, with the head high and the legs flexed upon the thighs and the thighs upon the abdomen, to steady the abdominal wall with the four fingers of the left hand placed just below and to the left of the umbilicus, and then with the fingers of the right hand make firm pressure downward into the right iliac fossa and drawing the fingers firmly over the surface of the iliacus and psoas muscles, and in most cases, even where there is no disease, you can palpate the appendix. I have thought that the appendix has a sensitiveness of its own in a normal condition, and the elicitation of pain must be rather pronounced before we can predicate upon it the diagnosis of inflammation. Indeed, I think an appendix which has once been inflamed is ever afterward more or less sensitive to palpation. It is very easy to err in palpating the appendix. I recall the prediction of Dr. Morris, at his clinic, which did not materialize. I recall one case in which it was quite easy to palpate the appendix, and I diagnosed a thick, chubby appendix; it proved upon operation that the part felt was the normal proximal portion, while the diseased portion was very much atrophied.

3. Rectal, or rectal and vaginal examination. Such examination often discloses the true condition of the appendix, especially if it is low down in the iliac fossa or in the pelvis. Such examination is also of the greatest aid in the differential diagnosis of this condition from the multitudinous inflammations and new formations which occur in the pelvis and its organs.

4. Temperature. The temperature may be only slightly elevated, though there is always some rise above the normal. If it becomes subnormal, pus has probably formed, or perforation taken place. It is not a very reliable aid in diagnosis, for it may be only a trifle above normal when the patient is suffering from extensive abscess. The remission of temperature is no indication that the patient is recovering, and perforation, collapse and death may follow a sudden fall of temperature to the normal or subnormal.

Tumor. Tumor is not present in cases of recurring appendicitis. When it is present it indicates an inflammatory mass, and if the inflammation has existed more than three days it usually indicates pus, but rarely can actual fluctuation be made out.

As I remarked earlier, the diagnosis can be made in most cases, especially in recurring attacks where the history clearly indicates the condition. In fulminating appendicitis with perforation and general peritonitis, the severity of the symptoms, the shock, the rapid onset and the course render the diagnosis easy and certain.

The differential diagnosis of appendicitis from other conditions which may be present is often very difficult. The symptoms are often very similar and the conditions which might be present are so numerous, including diseases of the liver, the right kidney, the pelvic organs, typhoid fever, psoas abscess, intestinal obstruction and even acute indigestion. Most frequently we are called upon to distinguish it from typhoid fever, right renal colic, hepatic colic, acute indigestion and stercoral typhlitis. The differentiation from typhoid fever is the most frequent and also the most difficult. The sudden onset in one otherwise healthy, the board-like abdomen, the possible history of a previous attack, all these point unmistakably to the diagnosis of appendicitis. The lassitude, the gradual onset, the bleeding from the nose and the characteristic morning and evening fluctuation of temperature point to typhoid fever. The palpation, abdominal or rectal, of mass in the abdomen completes the differential diagnosis. From the later indications of typhoid fever it is not always possible to

make so exact a differentiation. In such a case the entire history with the symptoms must be taken in review and usually a correct diagnosis can be made.

From the inflammatory diseases of the pelvis, such as pyosalpinx and ovarian abscess, from the tumors, such as ovarian, fibroid and extra-uterine pregnancy, from the painful menstruations and the disturbances of the menopause, all of which conditions may simulate the symptoms of appendicitis. A correct differentiation can be made by a careful review of the history, and by a careful examination, under anesthesia, if necessary, of the parts involved. It will be found that the appendicular inflammation is less intimately related to the uterus, is more remote from it. Furthermore, each of these pelvic diseases has symptoms of its own; for instance, with fibroid tumor we have menorrhagia; with pyosalpinx and ovarian abscess, we have evidences of septicemia; in painful menstruation, very often both ovaries are affected and we thus have the pain on both sides. The pain is paroxysmal and severe at first and the menstrual flow is present.

Of the conditions of the kidney which may be most readily confounded with appendicitis, we have nephritic colic, pyonephritis, growths of the kidney. In renal colic the pain is over the kidney or radiates to the testicle or bladder. The urine contains blood and other evidences of renal disease. There is an absence of the usual signs of appendicitis.

Hepatic colic is to be distinguished by the history of previous attacks accompanied by jaundice, together with sudden, sharp, cutting pain in upper right hypochondrium and extending through to the back, together with some vomiting. If there is tenderness over the gall bladder without signs in the right iliac fossa, the diagnosis of hepatic colic is complete.

Acute indigestion may in its beginning be mistaken for appendicitis. Although the symptoms may be identical the first few hours, the rapid improvement within a short time under simple home remedies and diet determines the diagnosis.

I have never met, or at least recognized, a case of stercoral typhlitis. We are assured on good authority, however, that such a pathologic condition does exist and that its symptoms are those of appendicitis. Indeed, that appendicitis is often caused by the inflammation in the head of the colon due to retained foecal matter. This inflammation may go on to softening and perforation of the coecum and abscess formation, a condition if examined at this

point could not be distinguished from an abscess due to perforation of the appendix.

This condition of stercoral typhlitis occurs most frequently in middle and later life when appendicitis is less likely to occur. The diagnosis can only be established when the doughy, sausage-like mass can be felt in the cecal region. As this putty-like mass can only be felt in the first stages of the disease, you can see it is likely to be overlooked. The pain and the fever are not so marked as in appendicitis. Constipation, complete, or else a spurious diarrhoea may be present.

Cancer of the cecum. In this condition the age of the patient, the absence of temperature and the character of the tumor ought to make diagnosis easy.

Tubercular peritonitis. The appearance of the patient, the chronicity of the affection, the entire abdomen affected, the pain general, are sufficient points for a differential diagnosis. From psoas abscess the differentiation may become difficult, especially when the abscess is small and has not yet reached Scarpa's triangle. In this case the appearance of the patient, the rigid spine, the length of time the condition has existed, the temperature indicative of tuberculosis, all tend to the diagnosis of psoas abscess. The flexure of the thigh upon the abdomen usually occurs with the advance of the psoas abscess, and also occurs in cases of appendicitis, but is far more frequent in the former condition, and the presence of appendicular tumor or the determination of fluctuation in the psoas abscess will decide the final diagnosis.

To recapitulate. According to Deaver, the three cardinal signs are: "1. Sudden acute pain in one previously well. 2. Unnatural rigidity of abdominal wall. 3. Hardness over site of appendix at McBurney's point.

Tenderness increased—

1. Early pus formation.
2. Gangrenous change.
3. Perforation.

Tenderness decreased—

1. Discharge of faecal concretion.
2. After free evacuation.
3. In late pus cases with enough septic absorption to paralyze nerve filaments.

Distinction, when local, due to localized peritonitis, when general, due to: 1. Constipation. 2. Opium. 3. Paralysis of intestines. 4. Mechanical obstruction. 5. General peritonitis."

THE PROGNOSIS OF APPENDICITIS.

BY CHARLES G. FOOTE, M. D.

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The prognosis in any case of appendicitis should be guarded. Although the large majority of such cases, irrespective of the treatment instituted, recover, or apparently so for the time being, still one can never say positively in any given case that the patient will get well; for fatal complications may occur even in the seemingly mild cases.

There are a number of things which should be considered before giving a prognosis, such as the character and severity of the infection, the plan of treatment followed out, the condition of the patient, the time at which he is seen, and the presence of certain complications as abscess, perforation, obstruction, general peritonitis, etc.

As to the character of the infection. If the bacillus coli commune is found in pure cultures, or even associated with staphylococci, the prognosis is generally better than in those cases of streptococcus infection, with or without the presence of the colon bacillus, which are usually violent in their onset and rapid in their course. It is in this variety of the disease that fatal complications are most liable to occur. The cases of simple catarrhal appendicitis almost always recover, at least for the time being, no matter what plan of treatment is pursued. Although undoubtedly a large number of these cases do not relapse, still there is no way of telling which ones will recur, nor what the severity of the next attack will be. As a rule, however, each succeeding attack is more serious than the preceding one. With operation both during and between attacks, the mortality is practically nil. In those cases of chronic or recurrent appendicitis, where the patient is rendered an invalid, although severe complications are not so liable to occur, operation offers the only hope of cure with a very slight mortality. In those cases complicated with gangrene, abscess, perforation, general peritonitis, etc., the prognosis is grave, but where operation is made early is much more favorable. Such cases treated expectantly show 52 per cent. of recoveries as against 85 per cent. treated surgically. (Frank Hartley Dennis' System of Surgery.) The so-called fulminating cases with general peritonitis are almost invariably fatal, no matter what treatment is pursued.

The presence of a marked leucocytosis is indicative of a high grade of infection and should always be taken into account. Its absence is evidence of either a mild infection or a diminished resistance on the part of the patient.

The prognosis must be modified according to the condition of the patient. In robust individuals in the absence of complications, with leucocytosis, the prognosis is favorable. In those of diminished powers of resistance, with marked symptoms of infection, and with no leucocytosis, it is correspondingly bad.

Probably that which determines most the outcome of the case, is the method of treatment. The general consensus of opinion at the present day is that appendicitis is a surgical disease. The old method of treatment with opium is referred to, only to be condemned. It masks the true nature and severity of the condition and gives a false sense of security to the physician.

I believe we can safely make the statement that the conditions for operation being favorable, the prospects for a speedy and permanent recovery are much better with operation than without.

The time at which the patient is seen by the surgeon is of great importance in determining the outcome. As a general rule, the earlier the operation is done the more favorable the prognosis. There is no excuse for temporizing, except the attack be the initial one, and of a mild character, or the conditions for operation unfavorable, and that the patient be placed under the careful supervision of an intelligent physician. If the patient has had one attack, and at the expiration of a year there be no relapse, the chances of recurrence are very slight and operation is not indicated.

MEDICAL TREATMENT OF APPENDICITIS.

BY L. B. TUCKERMAN, M. D.

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Before the pathology of inflammations about the caput coli was understood as now,—long before surgical intervention was thought of except in cases where there was clear evidence of abscess, people had appendicitis not infrequently, and by far the larger portion of them recovered. I think we must concede that since the epidemic of grippe ten years ago cases of appendicitis have been more numerous than formerly and, probably, of severer type as well. Moreover, with our greater precision in diagnosis of the exact location of the disturbance we now include every case

of pain, vomiting, rigidity of abdominal muscles and local tenderness as appendicitis, whereas, formerly, the additional symptom of chill, fever, and local induration were considered as entering into the diagnosis of typhlitis or perityphilitis, as the ailment was then called. When we bear in mind the anatomy of the appendix, a non-elastic tube of serous membrane, containing within it a muscular tube, and within that, in turn, a secreting tube of small calibre consisting of mucous and lymphatic tissue, it is evident that the closure of the lumen at the cecal end with retention of secretion and the consequent excruciating pain, and its reflexes, vomiting and rigidity of the abdominal walls, may be caused by swelling of the muco-lymphoid tissues of the inner tube or by energetic contraction of the muscular fibres of the middle tube, or both. This retention of the secretion under pressure tends to produce necrosis of the inner and middle coats of the appendix, and, later, perforation of the serous coat, and before that occurs, migration of bacteria causing inflammation of the serous coat with adhesion. In the beginning of the attack, before necrosis has taken place it is a rational thing to seek by means of antiphlogistics and antispasmodics to reduce swelling of the mucous membrane, to allay the spasm of the muscle, and to check the development of inflammation in the serous coat. There are three drugs which, better than any others, are adapted to this end, viz: Tartar emetic, opium, calomel. Tartar emetic in small doses excites abundant secretion of the gastric and intestinal glandular apparatus. Alvine dejections become more frequent and more fluid, consisting at first of liquified feces, then a colored liquid in which are present biliary matter and some feces, and finally a whitish liquid resembling the rice water discharge of cholera. The drug also relaxes spasm. Opium allays pain and relaxes spasm, or more correctly it allays the pain by relaxing spasm. Calomel has a specific action on inflammation of serous membranes where the tendency is to fibrinous exudation, when the drug is given to the point of producing mild specific action. As I have more than once heard Dr. G. C. E. Weber remark regarding puerperal peritonitis, "I observed that where I could salivate them they got well."

The treatment by small doses of mercury given with the view of producing salivation and the use of small doses of opium and tartar emetic, given so as to produce alleviation of pain and free and abundant exudation from the intestines, and given in small and frequently repeated doses, so as to obtain the effect with the

minimum amount of drug, I regard as the very best treatment. I agree with those who object to giving it in large doses. It is only necessary to give opium in sufficient amount to relieve pain to such a degree as to render it tolerable, and this plan will be followed in two or three days by a large dark, tarry passage, and with the on-coming of that passage you will find a disappearance of tenderness, pain gone, and the patient convalescing in a very large number of cases. Besides this, my own practice has been to begin the use of salines first by free enemata the moment that the exhibition of mercury and tartar emetic produced the first symptoms of mild ptyalism. It has seemed to me that so many cases that I have seen have been accompanied by fecal impaction at one or the other end of the colon, that free use of salines by the mouth have too much of a tendency to drive a quantity of liquid fecal matter by no means aseptic, against the impaction and thus causing too much strain on the inflamed gut, and a possibility of perforation, so I have been accustomed to make the first attack on the impaction from below. I have, moreover, been wont to use hot applications, preferably the hot water bag. Where, however, hot applications do not appear to relieve I use the ice pack. Leaving the symptoms requiring operation to be spoken of under another head I will say that in cases where the pathology is as I have indicated, you will find that the use of small doses of mercury, tartar emetic and opium frequently repeated very often is all that is necessary to relieve the pain within a short time. You will not find sudden stoppage of the pain but an easing down of pain and of inflammation, after which the lumen of the appendix will again become open, the appendix will discharge its contents into the caput coli and the attack is practically over. I have a number of cases in my note books of recovery under this form of treatment. Now, however, I tell the patient that when he gets ready to part with that appendix I am ready to take it out, leaving him to decide whether he wants to risk a recurrence or not. By this means I hold my patient, for, if you do not offer to operate a case it very likely goes to the fellow who will. Some twenty years ago a business man of this town was taken with all the classical symptoms of appendicitis and I was called. Dr. B. W. Holliday was called with me. The man was quite ill, had an induration in the side, was treated as outlined, and recovered in two weeks. He has been in business ever since and has been perfectly well, never having a recurrent attack. Another case of which I have the notes here was that of a patient who had first a

slight attack with the classical symptoms who also recovered under the same treatment; eight years ago he had another attack, not very severe, keeping him in the house about a week; six years ago another attack occurred lasting three or four days; four years ago he had another more persistent attack, but at no time were the symptoms severe enough to necessitate operation. He was treated in the same way—recovered, and since then he has had no other attack. The other day I had him on my table and raked my fingers over his appendix as Dr. Parker has suggested and there was not a bit of tenderness to be elicited. I could report a number of other cases of which this line of treatment was used and recovery followed with no recurrent attack, so I maintain that even if we have symptoms of appendicitis it is worth while to spend some little time in finding out whether we have merely a simple catarrhal appendicitis or an appendicitis requiring operation unless, indeed, the indications for immediate operation are urgent.

WHEN SHALL WE OPERATE?

BY FRANK E. BUNTS, M. D.

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I presume that in selecting this subject for my part of the program the President had in view the fact that in the present state of medical opinion it is absolutely impossible to lay down any rule which will be, or perhaps ought to be, followed by the profession. Such a rule is not yet and probably never will be formulated. Yet it is a matter for congratulation that we are able to see a little light in the chaos of opinion and find that after all we are not so far apart as some would have us believe. It has occurred to me sometimes that some of us are not absolutely sincere in our statements of our position. Some say operate in every case without any qualifications and I am sure they do not do it. Others are opposed to all operations and so express themselves, and yet I am sure there are cases where even they will consent to or urge an operation, and among those who fancy that they have a definite rule by which they decide to operate or not to operate, I am sure it is not so much the rule as it is an indefinable impression gained from experience which oftentimes settles the question as to when they shall operate. It is possible to divide the cases of appendicitis into a group of classes each of which, perhaps, deserves a separate consideration.

1. Cases recognized as appendicitis at their inception of moderate severity of symptoms.
2. Cases recognized as appendicitis at inception and characterized by great intensity of symptoms.
3. Cases not recognized as appendicitis until several days have elapsed, symptoms then becoming pronounced.
4. Cases recognized as appendicitis in which the surgeon is not called until the symptoms have begun to abate as indicated by diminution of pain, temperature, and pulse rate.
5. Cases in which delay has resulted in general peritonitis or septicemia.

This classification though essentially arbitrary seems to me to be a fairly practical one, at least it is one that shapes itself in my mind as I examine a case of appendicitis, and since I realize that each operator has his own peculiar views regarding the question of operation I shall not attempt in any way to make their views harmonize or to present them for your consideration but rather add my own views, so far as it is possible for me to formulate them, to what has already been written.

1. Cases recognized as appendicitis at their inception and of moderate severity of symptoms. These cases are most elusive and deceptive. It must be clearly recognized from the start that however mild may be the onset there can be no possible way of telling when the case may become alarming and no physician or surgeon can tell more than one totally out of the realms of medicine when an appendix may rupture. A few days or a few hours may be sufficient to determine gangrene of the appendix.

I believe it is in this class more than any other that the physician and surgeon differ. Realizing fully the responsibility attached to an opinion in these cases I believe that if the conditions for operation, that is the surroundings, assistants, and operator, are favorable, immediate operation will result in the greatest number of cures. Personally, I cannot recall a case in a series now becoming somewhat extensive, when under such circumstances I have lost a patient. On the other hand I am sure from an examination of the appendices removed that while some of them would undoubtedly have gone on to recovery, perhaps never to recur again, some of them were already at the point of gangrene, or of rupture, or were filled with concretions or pus which foretold a severe or fatal attack if left alone.

There is one consideration, I am sure, which has contributed not a little to the desire on the part of the attending physician to delay the operation and that is the belief that if the patient recovers it is much better to operate between attacks. It is to be re-

gretted that this belief should have received the wide credence which it has, for it certainly has been a stumbling block of no small magnitude. I believe that any case of appendicitis can be operated upon at the beginning of an attack quite as successfully, indeed, often more successfully than between attacks and if it resolves itself into a question of operating at the beginning of an attack, and between attacks, then the former should be chosen. Why? (1) Because no one can positively say whether the patient will live through the present attack. (2) Because each succeeding attack when completed leaves the appendix, by reasons of adhesions, lymph deposits and increased abnormal relations, in a more unfavorable condition for operation. I feel very strongly that this fact cannot be too strongly emphasized and the sooner the glamour of operating between attacks and its fancied ease are removed the greater will be the safety of the patient. Suppose that in a case under this group the consent of the patient or of the attending physician cannot be obtained for an operation, is there any way in which we can follow the case and give a reasonable estimate as to its progress? In many cases, yes. In some cases, no. Some will change so rapidly for the worse that the patient will be beyond the reach of surgical or medical aid in a few hours. In the less acute and more favorable cases, however, we can follow the progression in most instances very accurately and intelligently by means of the white blood count. An increasing leukocytosis in appendicitis is, I believe, sufficient evidence of increased inflammation and probable pus formation, to justify the urging of an operation, while a stationary white blood count will almost certainly indicate the subsidence of the inflammation and a favorable outcome may be almost safely predicted. To variations of temperature I attach but little importance, but an increasing pulse rate is a matter of serious moment and deserves careful consideration, for it is probably the early indicator of septic intoxication or possibly of septic infection.

2. Cases characterized by great urgency and intensity of symptoms. In these cases I believe great pain to be the most characteristic and important symptom and I have no hesitation in saying that they should be operated upon at the earliest possible moment, and fortunately for the patient his acute suffering usually persuades him of itself not to delay in acquiescing to an operation. It is folly to wait under any pretext in these cases. It goes without saying, of course, that some might get well of themselves, but the very intensity of the symptoms leads us to fear rapid progress

and perforation may take place too early for nature in her conservative efforts to wall off the diseased appendage and permit general peritoneal infection.

3. Cases not recognized as appendicitis until several days have elapsed, symptoms then becoming pronounced. Even in these cases, it seems to me that operation is indicated, though it may not be so urgently demanded. The time which has already elapsed will probably have been sufficient to wall off the appendix and prevent the spread of infection and when strenuous objection is urged by the patient or the attending physician, it may be considered reasonably safe to wait long enough to determine by means of the white blood count whether the inflammation is progressing or diminishing. If the former, operate; if the latter, delay is under such circumstances permissible.

4. Cases recognized as appendicitis but which the surgeon does not see until the symptoms have begun to abate as indicated by diminution of pain, temperature and pulse rate. This class of cases is not infrequent and I recall at least five such in the past year in which I have advised against immediate operation and recovery followed in each. Why not urge operation in all these attacks? Why wait and operate between attacks? First, because the advantages of an immediate operation, absence of adhesions, etc., are lost. Second, because the patient's general condition is lowered and a few weeks of convalescence and recuperation will put him in a better condition to withstand the slight shock of operation. Would I operate in all these cases that had been allowed to reach the stage known as between attacks? No. What then governs my position? As near as I can formulate it, it is this. If the preceding attacks have been severe ones, I urge it. If the patient expects to travel or go away to school, or otherwise put himself in a position where immediate aid under favorable surroundings might not be secured I urge it. If the patient is not sufficiently intelligent to appreciate the importance of the condition and feels that because he has gone through one attack he will safely go through another, I urge it. But if the patient be intelligent, if his circumstances be such that he can obtain medical aid at any moment and if he will agree that at the first onset of the disease he will submit to an operation, then I do not insist upon an operation between attacks. Why? First, because he may never have another. Second, because the next attack is readily recognized and the diagnosis made very early. Third, because an immediate oper-

ation is in my opinion practically as safe and as easy as one between attacks.

5. Cases in which delay has resulted in general peritonitis or septicemia. What must the surgeon say in answer to an appeal that he operate in these cases; an operation of last resort, "the only chance for the patient." Well, if he were to answer according to his wishes, according to the best interests of his reputation and his disinclination to shoulder a responsibility that belongs elsewhere, I believe he would resolutely say, no. I must confess that I have been greatly tempted to take the position advocated by one of America's greatest surgeons at the recent meeting of the American Medical Association and say that these cases, so unfavorable in their outcome, so sure to die, that operation is hopeless and that the operator gets the credit of killing the patient and undeserved discredit is insensibly cast upon a conservative operation, for unfortunately, even yet to the average person out of the medical profession, appendicitis, grave or mild, is still appendicitis and the last thing done is the cause of death.

OPERATION IN THE INTERVAL.

BY N. STONE SCOTT, A. M., M. D.

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The topic of interval operations, which has been assigned to me, I judge from the program, is intended to include all of those cases which are not operated during the febrile or convalescent period of acute appendicitis. I shall therefore divide the subject into operations following acute appendicitis and operations for so-called chronic appendicitis.

At the present time the laity have such a good understanding of appendicitis that one of their first questions after they are sure of recovery is, will I have another attack? and if I have another attack how soon and how hard will it be? and not infrequently will they ask, must I have an operation? Time forbids my going into statistics or any lengthy discussion of the pros and cons; I shall at this time simply state my convictions. It is certainly a fact that many cases who have had an acute appendicitis will have another attack, numerous writers upon this subject placing the liability to

such second attack as high as 80 or 90 per cent. There seems to be no doubt that there are many cases of acute appendicitis which are not followed by a second attack either at a recent or remote date.

Shall we advise all who have had one attack to submit to an appendectomy? In my own practice I do not do it. What then shall constitute sufficient grounds for advising an operation? A second severe attack is good and sufficient reason for submitting to an operation, at the beginning if seen early, or after the patient is convalescent if he can be tided over this second illness. Repeated slight attacks also are frequently the forerunners of a severe illness and should be a warning. Failure of the appendix to recover itself in a reasonable time after a severe attack is a good and sufficient reason for its removal. Every case of acute appendicitis which does not make a satisfactory and rapid recovery should have the appendix removed. If we do our full duty we will advise every case which has passed through a severe attack to present himself for examination at intervals even after convalescence is well established, and if the appendix remains enlarged or tender the patient is running great risk of another acute attack.

Chronic appendicitis is a subject which at the hands of both the specialist and general practitioner has not received the attention which it merits. Many of the laity and, I am sorry to say, some of the profession view the subject of chronic appendicitis, indeed some include even acute, as a fad, and the unfortunate sufferer as possessed not necessarily of a diseased appendix, but rather of a diseased imagination. Sometime since when I was called to see a case of acute appendicitis of three weeks' standing which had resulted in intestinal obstruction, one of the older men in the profession remarked upon the subject of chronic appendicitis that he thought any case which could be operated through a little bit of an incision was not bad enough to need operation at all, and appealed to me to confirm his decision. I hardly felt like upholding his view since my perverted imagination has made me thoroughly convinced that I have been decidedly improved since having one of the small incisions placed upon my own abdomen.

The importance of chronic appendicitis lies in two facts: First, that many of the cases with simply a mild amount of "mutterings of the appendix" are forerunners of acute severe attacks; second, that chronic appendicitis gradually and insidiously undermines the health and thus lays the foundation for some serious intercurrent disease. The most characteristic feature of this form of

appendicitis, as well as of the acute, is its treacherousness. One has no assurance that because he has had two or three slight attacks, or even twenty or fifty, that his next one will be slight; it may be an acute gangrenous appendicitis with early perforation or rapid extension of inflammation.

The diagnosis of chronic appendicitis when it follows an acute attack is reasonably easy; but when it comes on slowly and insidiously the diagnosis is at times exceedingly difficult, because the main symptoms are only indirectly referable to the appendix, and the disease is thus masked. So it happens that many of these cases are treated for months and years as stomach, liver, or kidney cases, or even possibly for lung or heart troubles, or malaria, and many of them are in the hands of the neurologist for some obscure nervous disease. As illustrative of my statement I would cite the fact that two cases of appendicitis within the last few years have been referred to me as stomach cases for gastro-enterostomy, in which removal of the appendix has cured the stomach symptoms.

The symptoms of chronic appendicitis are many and varied; pain is an unimportant one not characterized by being located in the region of the appendix, some even have the most intense pain upon the left side, and many more have pain in the stomach, so that pain of itself is apt to be misleading. Not that the patient does not have pain in the appendix region, but it is frequently overshadowed by pain in some other place. The pain in the appendix region is usually of a dull aching character and can be intensified by pressure upon the appendix. Sensitiveness of the appendix, however, is a sign of great importance, and must be sought for by an intelligent examination in order to be elicited. Stomach symptoms play a very prominent part; vomiting is very rare in chronic appendicitis at any stage; the symptoms are those of indigestion associated with gas, heartburn, and a stomach sensitive to pressure. As a result of these digestive disturbances auto-intoxication symptoms are also present, headache, sleeplessness, rapid and feeble pulse which is sometimes intermittent, bowels usually costive but not infrequently a subacute attack is ushered in by diarrhoea.

The physical examination in chronic appendicitis is of the first importance in establishing a diagnosis, which can usually be made with each if the examination be carefully carried out according to Edebohl's method. Every case of chronic abdominal disease, whether the main symptoms seem to be referable to the

stomach, kidneys, bowels, or generative organs, should have a careful examination for the condition of the appendix. But how easy it is to neglect to make a proper examination. We examined the patient some time ago, we are in a hurry, it is too much trouble or too distasteful to the patient to prepare for a thorough examination; so on one pretext or another we do not examine, and after our patient has become tired of our tinkering some other doctor gets the credit of finding out what is the matter. The examination should be made for position, relation of other organs, length and shape, but especially for increase in thickness or sensitiveness. If the appendix is found thickened or tender it should be examined frequently, and, if the acute exacerbations of the general symptoms are associated with an increased tenderness of the appendix, it is more than a probability that chronic appendicitis is largely responsible for the symptoms. The sensations of the patient, while the examination is being made for chronic appendicitis, are of the greatest importance, as he can tell with great accuracy when the appendix is being pressed upon. It must not be forgotten, however, that a normal appendix is slightly more sensitive than the colon or small intestine, though this hypersensitiveness is only slight. Usually the appendix can be palpated and the increased thickness of the organ detected by the sense of touch. When it cannot be distinctly felt and the sensations of the patient must be relied upon, repeated examinations become necessary in order to determine the fact that the appendix is more tender whenever the general symptoms are worse. It is then not a question as to whether there be anything the matter with the patient, that is settled by the general symptoms, but what is the matter.

Chronic appendicitis is often a sequel of other diseases, notably of floating kidney and tubal disease of the right side. Not infrequently will the tubal disease recover and the other difficulty be left to harass the patient. It is in this class of cases that a differential diagnosis is not only difficult to make, but is of the first importance. Repeated careful bi-manual examinations may be required to disclose the condition of the ovaries and appendix.

It is in operations for chronic appendicitis that the on-looker supposes he sees the surgeon remove a normal appendix. In fact it is only when the appendix is properly prepared and examined that the true condition is shown. Many of these cases have all the pathological manifestations confined within the appendix, so that the external appearance is normal even on close inspection of the appendix as a gross specimen. If the appendix be cut open the

mucous membrane rolls out and over the cut peritoneal edges, the hypertrophy of mucous membrane and connective tissue is much more manifest. If the appendix be hardened and then cut it will be found that the lumen of the appendix is choked by the hyperplasia of the mucous and submucous tissues.

Finally, the proof that these appendices, which appear normal when first removed, are in a diseased condition, lies in the fact that the cases have the clinical symptoms of appendicitis and are entirely and permanently relieved by operation.

The treatment which is of most service for chronic appendicitis and is attended by least danger is appendectomy. This, if done in an aseptic and proper manner, with the patient in good general and local condition, is without danger.

OPERATION DURING THE ATTACK.

BY GEORGE W. CRILE, M. D.

Anesthetic. Chloroform, being attended by less struggling and followed by less vomiting, was more frequently given than ether. In cases in which the vaso-motor mechanism was seriously impaired either, on account of its lesser paralyzing effect upon this mechanism, was given. In two cases cocain was used, both were in extremis, and with large abscesses.

Therapeutics. For combating the toxic effects of sepsis, alcoholics and strychnia were employed. Alcohol in the form of whiskey, or iced champagne. In treating shock or sepsis saline solutions were added, either by hypodermoclysis in moderate cases, or intravenously, if severe. In the cases in which the heart was arrhythmic fluid extract of digitalis was given. The administration of any stimulant during operation was the exception. Experience and experimentation have shown that it is better to wait until an indication develops. The additional energy consumed in consequence of the stimulation should be spared to help the patient through the operation.

Should a patient be removed to a hospital during the attack? If the infective inflammation is limited to the appendix, yes; otherwise, no. The necessary handling is likely to spread the infection. A trained nurse can do much toward overcoming the deficiencies of a house.

Technique. An incision parallel with the fibres of the fascia of the external oblique and near Poupart's ligament, I have found most generally useful. The abdominal wall is thicker in this re-

gion, drainage may be made in a more dependent position and the infected area may be approached from a safer angle. This, of course, applies to cases in which the infection has gone beyond the appendix. If limited to the appendix the intermuscular method with the incision anywhere external to the border of the rectus muscle, over the most probable location of the appendix, is most useful. If there is a mass, the incision should be made just external to the most prominent point. The thicker the muscular wall severed the less will be the probability of hernia. The location of the abscess may demand the incision in the median line, the left side, through the cul-de-sac, in the loin, in the right hypochondriac, in fact in any part of the lower abdomen. Operations in the attack require ample incision for making the intra-abdominal technique. The importance of selecting the most advantageous point in opening the abscess cavity cannot be overestimated. I have usually carried the dissection down at the outer side of the mass, making the opening at the best point for drainage and the most accessible for directing the operation. It is generally possible to enter the abscess cavity without separating the adhesions at any point. As the pus escapes it is washed away with sterile water poured from a pitcher, the stream being directed into the abscess cavity which may be held open by means of retractors and the fingers. Gravity favors the formation of secondary abscess in the pelvis and rather frequently a small one may be in the fossa, with a large one wholly separated lower in the pelvis. Great care is needed on the part of assistants in making retraction, as the blades of retractors so easily break down the adhesions. It is very rare when the appendix may not be removed. In a series of 209 operations it was removed in all but 7. In the abscess cases I do not attempt to bring the appendix and the caput coli up but sever it where it is found, often not even applying a ligature to the stump. Small full curved needles and a long, slender needle holder enable the operator to suture the bleeding points in the cavity. If the opening be sufficiently wide and advantageously placed the abscess cavity may be inspected. This with digital exploration usually discloses the appendix, which in almost every instance forms a part of the abscess wall. Fortunately there are usually adhesions beyond the appendix. If the appendix is severed in its position there is but little danger of extending the infection, as it is literally cut away *in situ* from the wall. Since exercising extreme care in not manipulating the caput coli, in not trying to invert the appendix and in not even disturbing it from its

position, I have rarely had fecal fistula follow. I would lay great stress upon cutting the appendix free, instead of using blunt dissection. Drainage need practically never be employed in cases in which the infection is limited to the appendix.

Bacteriological examination may prove that many of the older abscesses are sterile, yet this cannot be determined at the time of operation with sufficient accuracy to warrant immediate closure as in a case of old pyosalpinx.

One of the most important points in the technique of cases of abscess is the provision for drainage. In cases in which the abscess is walled off, that is to say the peritoneum has overcome the tendency to invasion, but little drainage is necessary, but in the more virulent cases correspondingly increased drainage is required. In other words, provision for drainage should be proportional to the virulence of the bacteria rather than to the amount of the pus. Glass drain tubes are too rigid and, together with rubber elastic and other forms of tubular drainage, tend to produce pressure necrosis. At all events this form of drainage is more of a well than a drain, sort of a gauge showing how full of fluid the cavity is. Dry gauze or wick drains tend to become plugs that effectually prevent drainage, while moist gauze drains cut off at or near a level with the surface of the wound, drain only until their own meshes have acquired a capillary saturation, which is at best but a limited drainage. But if the gauze drains are made long enough to extend well down over the side and placed in contact with a mass of dry absorbent cotton, continuous capillary drainage occurs as shown by the amount of fluid collected. In every case of drainage a hot water bag is applied from the beginning to the end. In every drainage case moist bichloride dressings, 1-10,000, are applied upon the wound and the drains. If the abscess is sterile the antiseptic will at least prevent infection and lessen suppuration. If the abscess be not sterile then antiseptics are indicated. A 1-10,000 bichloride solution applied upon the outer dressings from which it may find its way by capillarity through the gauze drains into the infected area has been extremely satisfactory.

The cases recently perforated and in which an abscess has not yet formed demand a different technique. While in abscess cases the appendix is cut away in its bed, and the caecum is not disturbed, in this class the appendix, and if necessary the caput coli, should be delivered so that the manipulation incident to its removal may be made upon a bed of gauze and the appendix itself wrapped in gauze. Only in cases in which the appendix cannot be

brought up into the wound is it advisable to pack the cavity off with gauze. The technique for removal of the appendix while the infective inflammation is still limited to it consists in opening the abdomen by the inter-muscular method, in catching up the meso-appendix by means of a running stitch of catgut, in severing the meso-appendix, in inserting a purse string stitch in the caput coli around the base of the appendix, in making a circular incision through the peritoneal coat of the appendix half an inch from the base, in severing the remainder of the appendix at or near a level with the caput coli, in then inverting this peritoneal stump of the appendix and appendicular base into the caput coli as the purse string is drawn, thus disposing of the remnants of the appendix without the formation of a pedicle and leaving nothing but a peritoneal dimple to mark its former place. The abdominal wound may be closed with a single strand of catgut, layer by layer, a subcutaneous stitch closing the skin.

ANALYSIS OF STATISTICS.

Males	about 60 per cent.
Females	about 40 per cent.
Average age males.....	25 years
Average age females.....	30 years
Oldest	64 years
Youngest	4 years

About 30 per cent. of the appendices were in the pelvis; twelve were associated with disease of the right ovary or tube; one was adherent to the fundus uteri; in seven the appendix was not found.

About 75 per cent. had had previous attacks. In five, fecal fistula followed operation, in one of which it became necessary to resect the small intestine to effect a cure.

For the purpose of discussion the operations are arranged in the following groups:

	Cases.	Deaths.	
1. Operations in the interval and chronic appendicitis	42	0	0
2. In acute attack with involvement of the appendix only.....	30	0	0
3. In acute attack with localized infective inflammation and abscess.....	113	2	2 %
4. In acute attack with diffuse abscess and general peritonitis.....	24	12	50 %

Total number of operations, 209; deaths, 14; making a death rate of 6.7 per cent.

The conclusion of the Symposium will appear in the January issue of the GAZETTE. It comprises the following papers: Complications During Appendicitis; Appendicitis and Typhoid Fever; Appendicitis in Children; Appendicitis and Pelvic Disease; When Shall we Call the Surgeon; Hernia Following Operations for Appendicitis—Causes and Means of Prevention.

A CHINESE FOUNDLING ASYLUM. One of the greatest of Chinese wickednesses, and one which missionaries are constantly deploring, is child-murder. The photograph here reproduced shows a number of foundlings left at the door of that magnificent Italian institution, commonly called the "Girls' Orphanage," at Hankow. The institution now consists of five blocks of main buildings two stories high. The number of inmates is seldom less than a thousand, and up to the present time 94,650 taels (£12,000) have been spent on grounds and buildings. The expenses amount to about 200,000 francs per annum, and this is contributed mainly by France and Italy. Females of all ages are admitted to the orphanage, from a baby to an old woman; though the institute prefers them when they are young. The inmates come in many different ways, and for many different reasons. The babies are received much in the same way as in all foundling hospitals. Baskets filled with hay are placed on the veranda at the front door of the orphanage, and the mothers who bring the children deposit them in the baskets. There is always a Chinese watchwoman on the lookout for these waifs of humanity, and as soon as they are noticed they are taken in and attended to. Notwithstanding all the attention bestowed upon them, the mortality is very high, and if ninety out of a hundred live it is considered very good. Even after babyhood is past the foundlings require constant care and attention, and have to be treated with cod-liver oil and maltine until they are five or six years old. And this, of course, means that had they been left to the tender care of their Chinese mothers not one of them would have lived. It is a well-known fact that the percentage of female Chinese children who die is enormous. Girl babies are not a desideratum in a Chinese household, so that when too many come along they are got rid of. Parents who are not devoid of all natural feelings bring their children to the orphanage and leave them there. On several occasions babies only one day old have been left in the baskets; and it is no wonder that such frail morsels of humanity succumb to the effects of such unnatural treatment. There are no fewer than 500 nurses in the institution. All kinds of curious precautions are taken to prevent the babies from getting mixed up, each child having a special collar fastened around its neck—"The Wide World," London, May, 1900.

THE Cleveland Medical Gazette

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Editorial.

DR. GENTSCH'S CASE.

On July 11 a jury in Judge Dissette's court rendered a verdict against Dr. Gentsch, of Cleveland, for \$4,000 in virtue of an alleged case of malpractice. Although the shot was directed at Dr. Gentsch, the injury affects the medical profession and concerns every honorable member of it.

In this case the jury evidently considered their judgment in surgical science superior to that of trained and competent sur-

geons, for in the final adjustment they disregarded the evidence of the latter and looked to themselves for the truth.

Among the physicians who appeared before the court were: Drs. Bunts, N. Stone Scott, Crile, Tuckerman, Cook, House, Ellis and Royce Fry.

Drs. Fry and Ellis appeared in behalf of the plaintiff.

The trial of the case began in the February term of court, but was brought to an abrupt termination owing to the detection of a criminal in the jury.

The history of the case in brief is as follows: A young woman of 18, while riding her wheel, fell from it, striking presumably upon the right thigh. Friends assisted her into a neighbor's house, and Dr. Gentsch, the family physician, was summoned. A thorough and careful examination was made with negative results. There was some diffuse pain along the thigh, but no more than could be readily accounted for from the bruising of the soft parts. This was not sufficient to prevent her being assisted into the house without any great amount of discomfort. The patient was driven home and a careful examination of the limb again made, this time with the patient in bed, and the clothes removed. There was no deformity, shortening, loss of function, crepitus, eversion of the foot, swelling, discoloration, or, in short, a single objective symptom of fracture.

There was some pain, but it was not localized, nor was it severe, and the patient had suffered for years from rheumatic or neuralgic pain in the same thigh. This fact, tended, on the whole, to minimize the importance of the only symptom that existed.

The patient being of a high-strung, neurotic disposition, it was not considered wise to confine her to bed unnecessarily, and she was allowed to sit up and begin to walk, with the aid of crutches, on the thirteenth day following the injury. Dr. Gentsch, realizing the uselessness of daily oversight, and not wishing to multiply his visits unduly, directions were left that he would not immediately call again, unless summoned by the family, who were to keep him informed upon the progress of the case. About two weeks after this the doctor was again called, and found the patient sitting upon a chair complaining of some pain in the injured thigh. No further evidence of injury was present, the examination developing nothing further than that made on the thirteenth day after the accident, before her leaving the bed. This was the last time Dr. Gentsch saw the case for two and a half months, at which time the patient consulted another physician, who discovered a

shortening of an inch and a half. The patient had meantime, unaccompanied, gone to Meadville, Pa., four weeks after the accident, and returned after a visit of some ten days.

Dr. Gentsch, upon being informed of the condition found at this time, had an "X-ray" taken of the limb, which resulted in showing a slipping by of the ends of the bone with a consequent shortening, as mentioned above.

Just how the shortening occurred subsequent to the original fall is a matter of conjecture. The case presents a number of most unusual, rare and curious features, and holds a unique position in surgical pathology.

To sum up the facts in the case briefly, we have: A neurotic patient of nervous antecedents, in charge of a physician of unquestioned integrity and ability; a fall provoking no objective symptoms; and after the elapse of months, a shortening of an inch and a quarter becomes evident. What may have been the condition at the time of the accident?

A complete fracture is out of the question. It is difficult to conceive of a fissured or incomplete fracture without the force at the same time bruising the soft parts in a manner that would ultimately produce considerable swelling and discoloration. Is it not possible that a circumscribed area of periosteum may have become injured, followed in time by a softening of bone, and a gradual progressive shortening of the limb, without at any time there being a rupture in the continuity of the shaft?

To epitomize the expert testimony in the case: After fracture in the upper third of the femur, shortening from one to three inches is not unusual under the best treatment known to-day; the two limbs are normally seldom the same length, from an eighth to a quarter of an inch being the usual discrepancy, and the right limb usually being the shorter; a diagnosis of fracture following the injury was not warranted, or possible; the case, under the circumstances, received proper care and attention; and the shortening did not exceed the limit of good results.

The editor of the GAZETTE was present during the progress of the trial, and it was very evident to him that the case was conducted for the plaintiff with a determination to cover up rather than to acknowledge the truth, and to appeal to the prejudices of the jury instead of provoking from them an impartial judgment.

We believe that *trial by jury* in such cases is pregnant of injustice and harm to the medical profession, for, however honest and unbiased a jury may be, it is not competent to form a proper

judgment in medical ethics, and to reach a just and honest decision upon cases involving the intricate pathological principles of medicine and surgery.

Dr. Gentsch has received the indorsement of the medical profession through its accredited representatives, in his treatment of the case, and we trust he may be successful in carrying it before a higher tribunal.*

G. SEELEY SMITH.

DEDICATION OF A NEW HOME.

The Cleveland College of Physicians and Surgeons, Medical Department of the Ohio Wesleyan University, is now in its completed new home. It is conceded to be one of the best sites for a college of medicine that can be found in this city, in fact, in the entire state. The building, a neat, majestic structure, stands as a monument to the members of the building and finance committees and to the architect. Prior to Thursday, November 22d, it was a busy scene in and about the college. Professors, students and friends of the college were hurrying to and fro, beautifying the various rooms, laboratories and corridors with busts and portraits of eminent scientific men, shields, banners, palms, chrysanthemums, smilax, red and black bunting (the university colors), and American flags. Thursday morning dawned bright and fair. Early visitors thronged the building. There was a corps of bright, intelligent, would-be doctors, together with some of the senior members of the faculty to courteously escort them through the building, explaining the work of the different departments, and show apparatus of scientific interest.

At 2:30 o'clock Dean Parker opened the exercises with appropriate remarks. Rev. Dr. William Lane, presiding elder of the Cleveland District of the Methodist Episcopal Church, then gave the invocation. Dr. H. E. Handerson, secretary of the building committee, gave an interesting summary, showing how difficulties had been met and conquered and the final success crowning the enterprise was due to the munificence of the citizens of Cleveland who rendered this undertaking possible, and who deserve highest praise. A very fitting presentation speech was made by Edson B. Bauder, Esq., in response to which Rev. Dr. J. W. Bashford, president of the university, stated that the Cleveland College of Physicians and Surgeons had become affiliated with the Ohio Wesleyan University in 1896; soon after the land

for the new building was donated by the trustees of the First Wesleyan Methodist church in Cleveland, and that the erection of the building had been made possible by the subscriptions of John D. Rockefeller, who gave \$10,000; W. F. Walworth, \$5,000; Messrs. Edward Lewis and C. H. Weed, \$5,000, and the faculty, which gave \$5,000. Other funds having been collected by the finance committee.

The President also gave the reasons for and the advantages of having the medical department in a large city, and the larger the better. It seems that he had anticipated that Cleveland would be the metropolis of the Buckeye State and he was not disappointed. Following President Bashford's address, Hon. David S. Gray, of Columbus, delivered a congratulatory address. The benediction was pronounced by M. B. Clark and W. F. Walworth.

The guests then descended to the first floor, where they were served to an excellent lunch. There was music, merriment and good will a plenty.

In the evening the dedicatory exercises were continued at the Epworth Memorial church. There was a large attendance and the addresses, which were good, were well received. A program of the day's proceedings follows:

Transfer of the new building to the university, College Building, corner Brownell and Central, 2:30 p. m.

Presiding officer, Dr. C. B. Parker, dean. Overture, "Felecia" (Grunwald); invocation; summary, Dr. H. E. Handerson, secretary building committee; music, Intermezzo, "Russe" (Franke); presentation address, Edson B. Bauder, Esq., chairman building committee; address of acceptance, Pres. J. W. Bashford, Ohio Wesleyan University; congratulations and reminiscences; benediction.

Dedicatory addresses, Epworth Memorial church, 8 p. m.

Presiding officer, Pres. J. W. Bashford. Overture, "Morning, Noon and Night" (Suppe); invocation, Dr. Ward Beecher Pickard; music, selection from Tannhauser (Wagner); address, Bishop W. X. Ninde; address, Bishop W. A. Leonard; address, Governor Geo. K. Nash; song for cornet, "Love Song" (Arditi), Mr. E. L. Brown (orchestra accompaniment); address, Bishop I. F. Horstmann; address, Rabbi M. J. Gries; concluding remarks, President J. W. Bashford; benediction; march, "Hail to the Spirit of Liberty" (Sousa).

G. D. O.

CHANGE OF ADDRESSES.

Contributors, subscribers, correspondents and advertisers are requested to note that the Editorial and Business addresses of the GAZETTE have been changed. These addresses can always be found on the Editorial page of the GAZETTE. By paying strict attention to the correct addresses there is likely to be less delay in all matters requiring prompt attention. Articles and Correspondence for publication should be addressed to the Editors, the Osborn, 275 Prospect street, all correspondence relating to advertising, subscriptions and remittances therefor, should be addressed to the Business Manager, Room 720 Rose Building.

COMMENCEMENT EXERCISES OF THE TRAINING SCHOOL FOR NURSES, CLEVELAND GENERAL HOSPITAL.

The Annual Commencement Exercises of the Training School for Nurses of the Cleveland General Hospital, 274 Woodland avenue, were held on Thursday evening, 8th November, in the amphitheater of the hospital.

The nurses who received their diplomas and badges are as follows: Miss Retta Fraser, Miss Eva Bennett, Miss Elizabeth Hackett, Miss Laura Spencer, Miss Hattie Parker, Miss Alice Lloyd, Miss Zaroda Patmore, Miss Nora Roberts and Miss Helen Williams.

In the absence of Mr. W. J. Akers, the chair was occupied by Dr. C. B. Parker, and the following program was executed:

Invocation, Rev. Ward Beecher Pickard; address of welcome, Dr. C. J. Aldrich; violin solo, Mr. J. A. Hicks; address, Rev. Ward Beecher Pickard; Reading, Mr. W. J. Hoppe; presentation of diplomas, Dr. C. B. Parker; awarding of badges, Miss Smythe.

There was a large attendance of the friends of the nurses and all enjoyed the proceedings. After the exercises the nurses and their friends were entertained to a banquet.

New Books.

BRAIN IN RELATION TO MIND. By J. Sanderson Christison, M. D., author of "Crime and Criminals," etc. Formerly of the New York City Asylums for the Insane, etc. Second edition. Chicago. The Meng Publishing Co., 1900.

As the result of nearly twenty-five years of psychological study, aided by the best facilities for observations of the insane,

Dr. Christison presents a little brochure which appeals quite as much to the layman as the physician. His title calls to mind Bastian's classical work "The Brain as An Organ of Mind." It is interesting to note that the Doctor characterizes what he calls *the current evolution idea* as "the greatest delusion of the nineteenth century," and places in the same category atavism. Devoting his first chapter almost entirely to the presentation of the claims of materialism, he takes up the second, third and fourth chapter a discussion of the brain in both its anatomical and physiological relations, in the latter discussion particularly the theory of mind localization. He says of late the trend of opinion favors the posterior lobes of the brain as being those chiefly involved with the higher mental processes. From a great amount of study of statistics he very effectually demonstrates that the knowledge concerning the location of mental activity is extremely indefinite. The remainder of the book, which, by the way, takes up only 135 pages, reviews brain form and brain size in relation to mind, giving numberless figures as to the studies which have been made of the weight, shape, and form of brain. In closing the book he studies the normal mind, giving an interesting table on the philosophy of degeneration or causational analysis of mind fault. There is no question but that the book can be read with interest and profit by all, and we hope in the near future to have the pleasure of seeing and reviewing another book which he promises along the same line, but referring particularly to psychology.

A TEXT-BOOK OF THE DISEASES OF WOMEN. By Henry J. Garrigues, A. M., M. D., Gynecologist to St. Mark's Hospital in New York City; Gynecologist to the German Dispensary in the city of New York; Consulting Obstetric Surgeon to the New York Maternity Hospital; Consulting Physician to the New York Mothers' Home and Maternity Hospital; Ex-President of the German Medical Society of the City of New York; Fellow of the American Gynecological Society; Fellow of the New York Academy of Medicine; Member of the Society for Medical Progress of the Eastern Medical Society; of the New York County Medical Society, etc. With 367 illustrations. Third edition. Thoroughly revised. Philadelphia. W. B. Saunders & Co. 1900.

This work is designed especially for the general practitioner and the student, and contains many practical hints and details not usually found in the larger works.

The author has shown a fine sense of discrimination in selecting his method, and has not entered into all the methods—

of interest only to the specialist—of treating every disease. The work is clear, concise, and practical, and admirably serves the purpose for which it was designed. G. S. SMITH.

RHINOLOGY, LARYNGOLOGY AND OTOTOLOGY AND THEIR SIGNIFICANCE IN GENERAL MEDICINE. By E. P. Friedrich, M. D., private doctor at the University at Leipzig. Authorized translation from the German, edited by H. Holbrook Curtis, M. D., consulting Surgeon to the New York Nose and Throat Hospital, and to the Diphtheria and Scarlet Fever Hospitals. Price \$2.50 net. Philadelphia and London. W. B Saunders & Co., 1900.

It is refreshing to read a book written by an author who has theories and opinions of his own, and who is not afraid to express them. Although sometimes the writer elaborately builds up a straw man and then demolishes it with evident delight, there is not infrequently method in his madness. It is true the majority of readers who have had considerable clinical experience in the observation of ear and throat diseases would not agree with the author in his belief that adenoid vegetations do not directly interfere with the ventilation of the middle ear; or that dentation and caries of the teeth never cause ear diseases; or that reflex neurosis is largely a myth; or, again, on the other hand that indigestion and mal-nutrition are frequently caused by pus trickling through the eustachian tube; or that emphysema and fetid bronchitis is due to the same cause as atrophic rhinitis, and many other heresies equally as faulty if translated into plain English.

The author is typically German in his methods of investigation, and will not recognize any diseased condition that can not be demonstrated in the biological or chemical laboratory. He is consistent in following out theories elaborately evolved in the laboratory to their ultimate conclusions, no matter how absurd, thereby demonstrating his sanity.

The book is greatly marred by the author's style of writing. The sentences are long and ponderous, and the most simple statement often made obscure by the unnecessary use of scientific terminology. Many sentences will have to be read several times before arriving at the author's meaning. While the reviewer has not had the pleasure of comparing the translation with the original, he is inclined to think that with a little more care the translator might have made a much more readable book. As it is the book will not appeal to the general practitioner but every specialist in ear and throat diseases will read it with profit to himself, and no doubt with benefit to his patients. A. R. BAKER.

EYE, EAR, NOSE AND THROAT. A Manual for Student and Practitioners.

By William Lincoln Balleuger, M. D., Assistant Professor of Otolaryngology, Rhinology, and Laryngology in the College of Medicine of the University of Illinois (College of Physicians and Surgeons), Professor of Otolaryngology, Rhinology, and Laryngology in the Chicago Eye, Ear, Nose and Throat (post-graduate) College; Member of the International Congress of Otologists (London), etc. And A. G. Wipperfurth, M. D., Professor of Ophthalmology and Otolaryngology, Chicago Eye, Ear, Nose and Throat College. Series edited by Bern. B. Gallaudet, M. D., Demonstrator of Anatomy and Instructor in Surgery, College of Physicians and Surgeons, Columbia University, New York; Visiting Surgeon, Bellevue Hospital, New York. Illustrated with one hundred and fifty engravings and six colored plates. Lea Brothers & Co., Philadelphia and New York.

This manual of 511 pages deals with diseases of the eye, ear, throat and nose in a very terse manner. The work is very nicely arranged and will be of value to the undergraduate who, by its use, may quickly review the subject of a previous lecture. The general practitioner will find it a ready book of reference, but we would recommend a more comprehensive treatise as one to rely on for more complete detail as to various procedures, and the specialist will find nothing new in its pages. One good feature of the book is the brief anatomical review at the beginning of each chapter, which deals with the diseases of the respective structures.

EDWARD LAUDER.

A TEXT-BOOK UPON THE PATHOGENIC BACTERIA, for Students of Medicine and Physicians. By Joseph McFarland, M. D., Professor of Pathology in the Medico-Chirurgical College, Philadelphia; Pathologist to the Medico-Chirurgical Hospital, Philadelphia; Fellow of the College of Physicians of Philadelphia, etc. With 142 illustrations. Third edition, revised and enlarged. Philadelphia. W. B. Saunders & Co. 1900. \$3.25.

This work by this eminent authority now appears in its third edition. The contents are considered under two main headings: Part I. "General Considerations." Part II, "Specific Diseases and Their Bacteria."

The book is not intended as a laboratory guide, although it contains considerable information upon the methods of cultivation and observation of bacteria, it being mainly intended for students and practitioners of medicine. It contains 621 pages, "General Considerations" occupying 245 pages, and "Specific Diseases and Their Bacteria" the balance. The print and illustrations are clear, the paper good, and the binding fully up to the standard of excellence which is characteristic of the publishers.

EDWARD LAUDER.

A MANUAL OF SYPHILIS AND THE VENEREAL DISEASES. By James Nevins Hyde, A. M., M. D., Professor of Skin, Genito-Urinary, and Venereal Diseases, Rush Medical College, Chicago; Dermatologist to the Presbyterian, Michael Reese, and Augustana Hospitals, of Chicago; Consulting Dermatologist to the Chicago Hospital for Women and Children, and to the Chicago Orphan Asylum. And Frank Hugh Montgomery, M. D., Associate Professor of Skin, Genito-Urinary, and Venereal Diseases, Rush Medical College, Chicago; Professor of Skin and Venereal Diseases, Chicago Clinical School; Dermatologist to St. Elizabeth's Hospital, Chicago. Second edition, revised and enlarged. With 58 illustrations in the text, and 19 full-page lithographic plates. Philadelphia. W. B. Saunders & Co. 1900. \$4.00.

In this we have a valuable work which is intended specially for the student and general practitioner. The scope of the work includes syphilis (and under this heading it takes up the affections of the various organs, tissues and appendages), chancroid, disorders not invariably venereal, hypochondriasis, acute urethritis, chronic urethritis, complications of urethritis, stricture of the urethra, gonorrhœa in women. It contains 594 pages. The print is clear and the paper good. The 56 cuts and 22 colored plates are very clear, the colored plates being faithful reproductions of the diseased conditions they are intended to represent.

EDWARD LAUDER.

Society Proceedings.

May L. Bassett, Medical Reporter.

CUYAHOGA COUNTY MEDICAL SOCIETY, Oct. 4th, 1900.

The regular meeting of the Cuyahoga County Medical Society was held at the Cleveland Medical Library Thursday evening, October 4th, 1900. The meeting opened with the President, Dr. Aldrich, in the chair. The minutes of the last meeting were read and approved, and Drs. Edward S. Lauder and John N. Lenker were elected to active membership, after which the regular program of the evening was called.

Etiology of Appendicitis, by Dr. Guy H. Fitzgerald.

Diagnosis of Appendicitis, by Dr. Charles B. Parker.

Prognosis of Appendicitis, by Dr. Charles G. Foote.

Medical Treatment of Appendicitis, by Dr. L. B. Tuckerman.

Appendicitis in Children, by Dr. Joseph V. Kofron.

Discussion:—

Dr. Cushing: I was much interested in Dr. Fitzgerald's paper on the etiology of appendicitis. I note that he did not speak

of recent work of some French writers, Dieulafoy in particular. Dieulafoy believes that all cases of appendicitis are due to the entire closure of some portion of the canal with the formation of a terminal closed cavity, whether by an acute process, comparable to the obstruction of the Eustachian tube in acute otitis, by a chronic obliterating appendicitis, by the increase in size of a calculus, or by flexure, twist, strangulation or other cause. The symptoms of appendicitis only declare themselves when this closed cavity, large or small, is produced, for in the closed cavity at once results an increase in the virulence of the ordinarily harmless colon bacillus. Dieulafoy has demonstrated this increase in virulence, which as Klecki has shown also occurs in the occluded gut of a strangulated hernia. De Rouville has produced purulent appendicitis in the rabbit by aseptic ligature of the appendix at its base. Dieulafoy has further shown that with the occurrence of the closed cavity columns of the colon bacillus quickly traverse the walls of the appendix gaining the peritoneum and provoking peritonitis even in the absence of perforation. It does not follow that complete obstruction of the canal is always to be found at operation. The occluding calculus may have escaped; or the acute swelling of the mucosa may have subsided without serious result for the time as the subsidence of the swelling of the Eustachian tube may relieve the threatened middle-ear abscess. Dieulafoy's theory of the closed cavity leads him to the clinical conclusion that all cases of appendicitis should be operated on without delay, not that patients may not recover without operation but that all cases bring with them possibilities of serious mishap. To quote him literally: "One never repents having operated for appendicitis, one often regrets not having operated or of having operated too late." A diagnostic symptom which I have found of assistance in addition to the cardinal signs of muscular resistance and localized pain and tenderness is hyperesthesia of the skin in the McBurney region. This is elicited by the slightest touch and often provokes a painful reflex contraction of the underlying muscle.

Dr. Aldrich: I note Dr. Kofron's statement that there is a greater blood supply to the appendix vermiformis of females than in males. I would like to ask Dr. Cushing whether this lack of blood supply can be a contributing cause to the bacterial activity which seems to obtain within the appendicular cavity. Since we regard the appendix as a rudimentary structure and males suffer disease of the organ more frequently than females, is it possible

that Nature's method of getting rid of this useless pouch is to deny it nutrition?

Dr. Quirk: I think the very great majority of operators report more cases found in the male; I took particular pains to look this up lately and in nearly all cases examined I found this to be the case. Gynecologists and those who operate on females found the number of cases in excess of those in the males. But these are often not enumerated as appendicitis cases. The general surgeon might find this per cent. in favor of the males. One reporter who reported forty or fifty cases operated says there are two to one per cent. in favor of the females. The statistics of the question of age may vary much for the same reason. Different operators have different classes of patients, some have more children to operate upon perhaps. I find that the age in all cases average 19.2; that is a little below the average, I think. I see that Dr. Parker in his differential diagnosis did refer, in speaking of typhoid fever, to the varying pulse rate as an aid to diagnosis. The pulse in appendicitis, if the peritoneum is involved, and it usually is, is very rapid. While in typhoid fever it is not so rapid, and in character there is considerable difference also.

Dr. Aldrich: I believe that Dr. Fitzgerald has recently made a large number of blood examinations in these cases with reference to the leukocytosis. We should like to hear what the result has been.

Dr. Fitzgerald: The presence of leukocytosis does not prove to be an absolute sign in diagnosis. We found its greatest value in proving whether the disease was gaining ground or losing. If in a case of appendicitis we find that the white blood counts taken at different times during the day vary (increase or diminish) we are able to say whether the disease is increasing or decreasing; that is, whether the case is going on to resolution or growing worse and must be operated, but if the case be an old one there are so many things that enter into the question of leukocytosis that it would require a considerable review of the conditions to make a report of much value.

Dr. Morton: I would like to ask Dr. Parker if we can have appendicitis without the board-like feeling in the abdomen. I have been uncertain many times whether I was justified in calling a case appendicitis when I did not have this condition. I have had cases in which there was increased temperature, pain over the McBurney point and vomiting, but no muscular rigidity, and I would like to ask whether one might have a case of appendicitis without

this board-like condition. In other words, what does the rigidity mean, and is it always present?

Dr. Parker: I would say in answer to the gentleman's question regarding the possible absence of this abdominal rigidity or board-like feel of the abdomen, that such a thing is possible. That is, a symptom may arise in a given case which you may have never seen before in similar cases; or, pathological conditions may exist without all the usual symptoms being present. So I think you might have appendicitis without the "board-like" feel I have described, though I have never seen a case of any duration in which it has not been present. But as I said, I think we should look for a group of symptoms and base our diagnosis upon them though we might not have every symptom present in a given case. I think this abdominal rigidity is due to an irritation of the peripheral nerves in the muscles and that it is usually present. That there may be an occasional exceptional case is possible, but my experience is that it is present and that it appears only in the disease. I would say simply that anything is possible in medicine and diagnosis—that is, a symptom may arise which you may have never seen before in a like case, or a pathological condition may exist without all the usual symptoms, so I think you might have appendicitis without the board-like condition, though I have never seen such a case. But as I said, I think we should look for a group of symptoms and base our diagnosis upon these, though we might not have every symptom present in a case of appendicitis. That there may be an occasional exception is possible, but my experience is that it is present and that it appears early in the disease. There might be some reason, however, why it would not be present, or, again, it might disappear after rupture of the abscess and in the later stages of the disease.

Dr. A. G. Hart: It has been said of a man whose work amounted to more than he had anticipated, that he builded better than he knew; and I think that as older practitioners, knowing nothing of appendicitis as it is now understood, we builded better than we knew. For doubtless we treated many cases of this disease as typhilitis, perityphilitis or circumscribed peritonitis, and certainly with a good degree of success.

I will not go over the ground, but simply say that my own treatment then consisted largely in giving opium in sufficient doses to relieve and keep down the pain, laxatives, calomel and hot application.

Undoubtedly the cases are now more numerous than formerly, and apparently more critical. The surgeon is very much in evidence in the treatment and it is no longer questioned that many cases can only be saved by an operation. In the last few years, since our attention has been so closely turned to this disease, I have treated numerous cases, of course not so many as some other practitioners. It has been my exceeding good fortune not to meet a case demanding an operation; and without claiming any peculiar skill I am not able to recall a single fatal case during this period.

I was called to a young man taken in the night with agonizing pain over McBurney's point, acute tenderness, vomiting, rapid pulse and every symptom of an alarming attack of appendicitis. I gave half a grain of morphia hypodermically, and as he was not fully relieved, one-fourth grain more in an hour. This was followed by Rochelle salts in laxative doses and a hot water bottle. The violent symptoms were relieved at once, and the patient made comparatively comfortable, and the morphia continued in doses to keep down the pain. Convalescence and recovery were rapid and complete.

Recently I saw a boy of 15 who had for twenty-four hours suffered with increasing severe pain and tenderness over McBurney's point. When I saw him his temperature was $103\frac{1}{2}$ degrees and there was a circumscribed tumor at the point of tenderness. The treatment was essentially the same as in the first case. Convalescence was a little delayed, recovery complete.

I think it is accepted by the profession that opium is the most valuable remedy we possess for holding in check most of the inflammatory diseases, and I must still believe that it is the pre-eminent remedy in the medical treatment of appendicitis. Should I be so unfortunate as to have an attack, I shall demand full anodyne doses until the pain is relieved, and I shall not stand upon the order of going, and I don't with my patients. This may be a rut I have fallen into, but if so I shall hardly get out at this late date, and if called in the future to see these cases I shall, I presume, continue to give the same old medicine "early and often" until the patient is relieved.

Dr. Aldrich: I recall the examination of a woman, eight months pregnant, with Doctors Burton and Bunts. It appeared to be appendicitis; there was extreme nausea, some pain, but one-half degree increase of temperature, pulse eighty, and no board-like rigidity. The question arose as to whether the absence of the

latter symptom was due to a pregnant state or whether it was due to the fact that the abdomen was full of pus, which an operation revealed.

Dr. Campbell: I want to say a word upon this question. I do not agree with Dr. Cushing that hyperesthesia of the skin is a diagnostic symptom. I have not found it so. I think with Dr. Parker that the diagnosis depends upon grouping of symptoms. I was very much surprised at Dr. Sawyer's conclusion after practicing medicine for nearly forty years. I am surprised that he should consider appendicitis in every case a surgical disease. I was very much pleased with Dr. Hart's decision, and I think his experience has been a very wide one, as he has practiced both in the army of civil war and since, and I note that he said he has had no recently fatal case. Now it is certainly very misleading to the young men who have come here this evening to think that we must turn all these cases over to the surgeon right at the start. I am not going to tell how many years I have practiced medicine, but it has been long enough so that I have had many cases of appendicitis. I have had, in years gone by, before we differentiated these cases as we do now, cases of typhilitis, and perityphilitis, and have treated them successfully. I do not say that cases treated by surgical operation will not get well, but I do ask, is it not better to use remedies and local applications to get the patient well if you can instead of operating? I do not believe that the general practitioner from what we know is to come to the conclusion that it is necessary for him to call the surgeon to operate just as soon as he has a case of appendicitis.

Dr. Morris D. Stepp: In thinking over all that has been said this evening about appendicitis, especially about the diagnosis of appendicitis, it strikes me very forcibly that almost all of the symptoms are inconstant. This leads me to refer to blood examinations again. I think that a leukocytosis in an appendicitis has the same significance that it has in any other case where pus formation is a possibility. A blood examination alone, taken as a positive means of diagnosis, has but little value except in a few such diseases as mixed leukemia, lymphatic leukemia, malaria and spirillum fever, but taken in connection with the history of a case which embraces any of the cardinal symptoms of an appendicitis and where a leukocytosis is found, I think it has every worth that we could wish for. No reasonable doubt could be expressed as to the gravity of the lesion or to the necessity of an immediate operation. During the last year I have had the op-

portunity to observe the blood examination of a fair number of appendicitis cases, amongst which were six complicated by pus formation and in each instance it was verified before I had operated, by finding a leukocytosis. Everyone who has had much to do with blood examinations, I think, will agree with me in saying that a leukocytosis has its special value as a diagnostic aid in pus formations and particularly in appendicitis, where most of the other symptoms are inconstant and therefore unreliable. The advantage gained in finding a leukocytosis should not be lost sight of, since in many instances it is the only means in our possession of differentiating clearly between the catarrhal and suppurative forms of this disease.

Dr. Reich: I wish to say a word in regard to the medical treatment in appendicitis, but it may sound better if I say it in the name of a recognized teacher. There is an oriental saying, "If you want to hang yourself, hang yourself on a *high* tree;" or, in other words, if you want to say something that will be well received, say it in the name of some great master. I shall therefore quote Professor Heubner of Berlin, who is authority on diseases of children, and who is associated with the world-renowned surgeons von Bergman and Franz Koenig. I heard him more than once say: "I am against those that are ready with the knife as soon as they suspect appendicitis. Give them opium so that the peristaltic movements of the bowels are arrested and the inflamed area is at rest. Don't be afraid if your patient has no passage from the bowels for fourteen days; that part of the trouble will easily be remedied." That experienced clinician maintains that an operation very often causes relaxed abdominal muscles which is the source of many subsequent troubles.

Dr. Tuckerman: In regard to cases mentioned in which rigidity of the abdomen is not present I wish to say a word. I recall two recent cases of appendicitis in which there was no rigidity. There was no doubt about the correctness of the diagnosis. One appendix had a concretion and ulceration of the mucosa, and in the other the mucous and muscular coats were gangrenous. I wish to say also in regard to giving opium with tartar emetic that the combination does not lock up the secretions. There is no such thing as locking up the secretions with its use and it is perfectly safe to employ it in these cases.

Dr. G. W. Crile: No matter what may be desired nor what the circumstances surrounding the case may be, the greater part of the responsibility of the *result* of an operation falls to the surgeon

by virtue of his performing it. Accordingly, I believe that the surgeon should be given an early opportunity to help to decide in what cases and at what time he is to assume this responsibility.

Dr. Porter (Cincinnati): I thank you for the invitation to take part in the discussion and am very glad to have had the opportunity of hearing the papers this evening. I think I have never heard a series of papers on the subject which were more interesting. They are so concise and clear and cover such a wide ground. I think that every one of us concludes more and more year after year that no one of us knows all about this subject and that discussions upon it are very helpful. The topic never comes up that we do not hear the opinions of the radical men and the conservative men. I would like to say a few words myself upon the subject. It seems to me that *Dr. Crile's* position is a very strong one. I think that if the physician intends to call a surgeon, it is necessary that he should call him early.

It seems to me that there is no more desperate position for a surgeon to be in, in a case of appendicitis, than to be called when a patient is almost moribund. It is not only hard on the physician but also bad for the community. These operations are almost always done in the home and every one in the community knows that the patient is ill. They hear that it is a case of appendicitis, then they see the physician there, then the surgeon, and perhaps an assistant with him, and then finally the undertaker, and the natural conclusion which the community arrive at is that the operation is a dangerous one and the blame is laid at the surgeon's door, whereas the truth is that the disease is a dangerous one and if the surgeon had been called in before rupture of the appendix the patient's life might have been saved. This does great harm in the community in creating feeling against the operation. I recall a case of a young man which I was called to operate and the mother refused because she had known of fatal cases. The result was that in spite of all that I could say my patient was allowed to die. Now these are unusual cases I know, for the laity are coming to understand that the operation is a simple one and far more safe than the chances of perforation. I think the time is coming when the surgeon who has not been called in season will decline to operate under such circumstances. I was particularly struck with the arrangement of the papers this evening. I think I never heard the ground so carefully and thoroughly covered.

One of the gentlemen gave a deferential diagnosis so clearly

that it seemed that he left nothing more to be said. He spoke of tumors, particularly ovarian. The twisted pedicle often simulates appendicitis more nearly than any other disease, and these cases are most difficult to diagnose, more so than any I have ever seen. As to the question of hyperesthesia as a diagnostic symptom, I do not think this is always an absolute symptom of differential diagnostic value, but it does often exist. I recall a case in which I operated, and I remember that in dressing the wound each day I noticed the exceeding sensitiveness of the skin and that the least touch of the edge of the wound with a bit of gauze was sufficient to make the patient start away from the touch; asked why he did so, he said that it did not feel comfortable. I thought this might be due to his seeing what I did, so I tested him one day by touching it in the same manner when he was not looking, and the effect was the same.

Dr. Parker: I am sorry that in the discussion this question of the sensitiveness of the appendix was not entered into further. I have been in the habit of late of palpating every patient that comes to me, no matter what the case may be, and in almost all cases I have found the appendix sensitive upon palpation. I think if this is so (and I have noticed it for some time) that we should be very careful about placing undue weight upon the sensitiveness elicited by palpation. I merely call this point up as matter of observation—it may have a meaning, it may not.

Dr. Tuckerman: With regard to the tenderness of the appendix—it is not uniform in all cases. I have also been in the habit of palpating the whole abdomen in nearly every case coming under examination, and while there is some tenderness in many persons, yet it is not of the same that you find in appendicitis. I believe that the normal appendix may be sensitive. I have a sensitive appendix myself. In regard to the use of mercury in serous exudations—it is a question that has been decided as positively as the value of potassium iodide in syphilis. It is a clinical fact, one that you will find clearly stated in Woods' Therapeutics. The reason it is not better known among practitioners is because the Thompsonian theory frightened men out of using mercury for fear of salivation. The result was that many cases of renal disease, pericarditis, pleuritis, etc., were lost and students were not instructed in the value or use of the drug. I shall never forget my first experience with it. I had just come back from a New York school and of course knew all there was to be known. I was called to a case of pericarditis and used the remedies I had been taught, but

the patient grew rapidly no better. It was suggested that I call in a gray-headed practitioner to counsel with me. I did so, and after he had examined the case he said, "Well, my boy, your books tell you that the prognosis is bad but that patient will probably get well if you salivate him. I said, "I don't know how," and he proceeded to tell me how. He made up the pills of blue mass and I administered it. The man recovered and is alive yet. The use of calomel to check inflammation of serous membrane is one of the established facts in clinical medicine.

Dr. Tuckerman moved that the Society be adjourned to meet again in two weeks for the continuance of the symposium on appendicitis, which motion was carried and the meeting adjourned.

CUYAHOGA COUNTY MEDICAL SOCIETY, Oct. 17, 1900.

The adjourned meeting of the Cuyahoga County Medical Society was held at the Cleveland Medical Library Building on Thursday evening, Oct. 17, 1900. The meeting opened with the President, Dr. Aldrich, in the chair. Dr. Hart exhibited a specimen of stramonium and the capsules of the weed, and stated that it grew in large quantities on the South Side and had been the cause of frequent and dangerous cases of poisoning among the children. He cited a recent case from his own practice, and stated that the symptoms were those of marked poisoning—dilated pupils, pulse only slightly accelerated, delirium marked and stupor following.

The regular program was then called, as follows:

Operation in the Interval. Dr. N. Stone Scott.

Operation During Attack. Dr. Geo. W. Crile.

Complications During Appendicitis. Dr. Morris D. Stepp.

When Should We Call the Surgeon? Dr. J. H. Lowman.

When Shall We Operate? Dr. Frank E. Bunts.

Appendicitis and Pelvic Diseases. Dr. Roland E. Skeel.

Hernia Following Operation for Appendicitis; Causes and Means of Prevention. Dr. Carl A. Hamann.

Dr. Quirk: I am not a very good hand to talk against time, but it occurred to me when Dr. Skeel referred to the relation of the tubes and ovaries to appendicitis, that a little study of the course of the lymphatics in that region would give us a little light as to the conditions found there. We find that the lymphatics extend from the appendix to the tubes and ovaries, and we know that pus is more likely to follow the course of the lymphatics than

in the opposite direction. They also extend back up along the back of the colon from the appendix, which is the frequent cause of inflammation, while the appendix and inflammatory matter is walled off in front. The omentum, it seems to me, plays quite a role in Nature's methods of protecting the peritoneum by walling off the inflammatory processes, and very frequently we find it the only element entering into the sac when the pus burrows in front, and it has been my method to imitate Nature as far as possible and place the omentum about the field of operation as carefully as possible after operating—hoping that it would assist and facilitate the protection of the peritoneum and intestines. We have had quite a number of statistics given while considering this question as to the per cent. of mortality during operation. I think it was McRae, who, at the last June meeting of the American Medical Association, reported 2,903 cases which he had collected, having a mortality of 13.74. And Dr. James B. Morgan of the University of Georgia since last June has collected through the aid of personal letters and cases of his own, a report of 823 cases with a mortality of 15 per cent. He also reported having seen and known definitely of 20 deaths from cases not operated upon. This seems a large number for one man to observe. I believe that McBurney says that if a person has a second attack of appendicitis he would surely have more. Wyeth says that in all his experience he never knew of a case of death from appendicitis which was not directly due to neglect of early operation.

Dr. Campbell: It seems to me that I have not heard so many and such able papers in a great many years as I have heard tonight, and surely the subject has been pretty well covered. I don't think there is very much left to be said. There is very little division among the essayists tonight on any point except the one which we did not agree upon the other night. Two essayists bring arguments to modify the statement that appendicitis should always be operated, and the others say it is better to operate in all cases. It still seems to be an unsettled question. Everything depends upon the prognosis as we see it as to whether we will decide in favor of operation, or in favor of medical treatment. I think it is foolish to talk about there being no such thing as medical treatment. We might as well say that there is no such thing as treatment for an inflammation of the heart, or lining membrane of the heart, or any of the vital organs. We do not trust inflammation directly and cannot reach it to do so, but the average physician has means with which he endeavors to control it in some way.

If you had a case of inflammation of the heart, and you were sure of its presence there would be no reason why you should amputate the heart in that case.

Dr. Parker: I wish to refer to a symptom that I did not emphasize in my paper the other evening as I have not found it mentioned in literature, and was unwilling to give it on my own authority. It is that of tenderness in the normal appendix. I feel, from the result of my personal experience in palpating a number of normal appendices, that one should not depend too much upon the symptom of tenderness as I believe that the appendix has a sensitiveness of its own. Another symptom which I wish to speak of belongs to the severe or fulminating form of appendicitis and is not seen in the mild cases. It is spoken of in the literature of the subject and I have noted it in a few of my own cases. It consists of a blueness of the skin, especially that of the abdomen. It is not confined to the lips or extremities but is seen mainly in the region of the appendix itself. Dr. C. A. Wheaton, of St. Paul, Minnesota, who delivered the address in surgery at the recent meeting of the Mississippi Valley Medical Association held in Asheville, N. C., took as his subject "Appendicitis," and dwelt particularly upon this blueness of the superficial vessels of the skin of the abdomen. He regarded this condition as a paralysis of the vasomotor nerves of the skin. He regards it as a bad sign. I have found this to be true.

It has been very pleasant to have the personal element brought out in this discussion. It is impossible in literature to learn the individual opinions held upon a subject like this, as well as in a discussion which brings out the personal element. For myself I may say that I have had the usual experience of operators. No deaths where the operation is done in the interval of the attacks. I have had an unfortunate experience in cases where the appendix was gangrenous. I have had five such cases which I can recall this moment and four of them died. They were not cases that seemed particularly bad and nothing to indicate that they were particularly serious. One was the mayor of a town a short distance south of here. He had attended a political meeting the Saturday evening previous to the Tuesday morning upon which I operated. At the operation I found a gangrenous appendix. The walls of the appendix had sloughed and there was scarcely the form of the appendix left. He was a man of much importance in his community, and I was naturally anxious to save the case, but he died the second day after the operation. Another case was that

of a young lady. The only marked symptom which would lead one to think the case serious was the great rigidity of the abdominal walls. It looked like a case of general peritonitis. It had been in the hands of a very good medical man—about a hundred miles from here—who called me to come and operate. I found that the tip of the appendix was gangrenous but easily removed and no other complication. I thought she would recover, but much to my surprise she died three days later. The unfortunate termination of these cases makes me feel very anxious now when I find a patient with a gangrenous appendix.

Dr. P. H. Sawyer: I want to ask Dr. Parker whether he thinks that in these cases of gangrenous appendix an early operation would have saved the patient.

Dr. Parker: If you ask my personal opinion, I would say that I think it is doubtful if they would have recovered. I think there was a mixed infection present with a resulting septicemia, and I think that these cases are gangrenous almost from the beginning and die early. This question reminds me that the first case of appendicitis I ever saw was with Dr. Sawyer. In those days we hesitated to open the abdomen. In appendicitis an opening was made down to the peritoneum and then dissecting it up as in the operation for ligation of the external iliac artery until we reached the diseased appendix. If we could not reach the appendix we packed the wound and let it drain, hoping thus for a cure. I speak of it to show the difference between past and present methods of operation in appendicitis.

Dr. Merriam: The most interesting point in this discussion to me has been the one brought out by a number of the speakers, that it is impossible at first to say what case is going on to recovery and what case to perforation and resulting peritonitis. If it is not out of order, I should like to sight a case illustrating this point.

A boy, 11 years of age, was brought to my office at 6 o'clock one evening complaining of pain in the abdomen. He had not been feeling well that day, but had been up as usual. At this time the pain was located exactly over McBurney's point and radiating to the umbilicus. Deep pressure over the point elicited moderate pain. The temperature was 100.2 and the pulse 126, the latter evidently due to excitement. I sent him to bed and began the administration of calomel for catharsis; ice bag over appendix. At 10:15 I saw the patient again. The patient was asleep. On awakening the conditions appeared about the same. Temperature

99.8; pulse 104; no muscular rigidity; no pain except on pressure. Calomel was continued, followed by hot salines. At 2:30 conditions were unchanged. There was no muscular rigidity; pain the same; pulse 105; temperature 100. No bowel movement as yet. At 5 a. m., the father telephoned that the salines produced no action and I ordered an enema of soap and water. 6 a. m., no action from the cathartic or enemas; no muscular rigidity, no vomiting. At 7 a. m., the conditions changed; pulse rising in rate; temperature remains the same; tenderness on pressure much increased and muscular rigidity marked with moderate tympanites. At this time Dr. P. H. Sawyer saw the patient in consultation and an operation was deemed advisable. At 9 a. m. Dr. Allen saw the case. The patient was removed to Lakeside Hospital in a carriage, suffering no discomfort from the trip. Was operated upon at 10:15 under ether anesthesia. Considerable quantity of free pus was found in the abdominal cavity, the appendix perforated; no adhesions had taken place. Cavity was thoroughly flushed out. Patient recovered from the anesthesia fairly well but symptoms of sepsis developed and the patient died on the second night following. Bacteriological examination revealed a streptococcus infection.

On first seeing the case it seemed to me that if ever delay in operation was justified it was in this case. In view of the result, I resolved at that time that I would never again make a diagnosis of appendicitis without calling a surgeon in consultation at once.

Dr. Hanson: I do not speak on the subject because I expect to add anything to what has already been said. Some of the papers are the clearest and best I ever heard upon the subject. There is one class of cases in which I think very early operation is indicated and that is those in which the appendix is inflamed and no exudation surrounds it, for these are the ones that so soon become gangrenous and perforate, thereby producing septic peritonitis. I think in these cases the medical man should not be without the surgeon when he visits the case the second time. Of course if you know that nature is walling off the infected area you can wait.

Dr. Tuckerman: The question that arises in my mind in regard to these fatal cases which terminate so suddenly is this: is there not as much due to the nature of the infection as there is to the mere fact of perforation? One case perforates, nature walls off the infected area; another case perforates and you operate, establish drainage and treat the case with as much care as possible,

and yet the infection extends in spite of you over the whole peritoneum, and in two or three days later, or a week later, or as in one case of my own, four weeks later, you get death from toxaemia or exhaustion. It seems to me that the element of the nature of the infection enters very largely into the question of recovery or death.

LETTERS FROM PARIS.

BY H. E. HANDERSON, M. D., CLEVELAND, O.

(Continued from page 24.)

Vigorous and uncompromising a champion of orthodoxy in medicine as was Patin, in the sphere of religion he was an equally vigorous and outspoken free-thinker, and the vials of his wrath were poured out with impartial freedom upon pope, cardinal, and monk, whom he calls boldly the "pests of religion." Witness the following extract from a letter of 1649:

"I have not yet heard anything said about the new decree of the pope against monachism and the frightful number of monks now existing in France, and I even have serious doubts whether the pope, who is not a fool, will undertake a matter of such serious importance; for, unless he is supported by the power of the temporal rulers, he will never accomplish anything against the most mischievous and pestiferous class to be found in the world. He will be unable to command them, for they will not obey him. A pope created them, or at least approved of their organization, they say, and consequently no other pope can destroy or suppress them. Yet Pius V. abolished in short order the Humiliants, because one of them tried to kill St. Charles Borromeo, the good archbishop of Milan, and another pope long before had abolished the order of the Jesuits. I fail to see, however, what motive the pope can have in undertaking such a reformation, since all this motley crowd are his humble servants and aid him wonderfully in maintaining his power throughout the world and even his tyranny over the conscience. They are the pope's archers and bailiffs, not to say his spies and janizaries. . . . The late M. Grotius often said to me that, in order to reform France, three things must first be done: 1. Retrench the authority of the pope, which was increasing too rapidly in France. 2. Give bishoprics only to men capable of preaching and teaching, and not, as is done to-day, to courtiers and persons of evil lives. 3. Remove at once the superabundance of monks, or as he usually phrased it, *circumscidendus ille ingens Monachorum numerus*. Because of the scandal which the monks had brought upon Christianity, the fathers of the Council of Trent decreed that no new monks should thereafter be received. But through the pecuniary profit found in the business, just the contrary was actually done, and more

new monks have been received since that time than in fourteen centuries before. They are now so powerful that they are able to organize a schism against the pope himself, if he should undertake anything against them without the support of the sovereign princes. But let us leave these pests of religion and turn to those of medicine, I mean the apothecaries."

That Patin did not spare the dignitaries of the Church even in his gossip may be judged from the following passage:

"As for Cardinal Richelieu, he was a good sort of an ass (*bonne bete*) and a frank tyrant. So far as regards his holiness (*Sanctus olim dicebatur qui abstinebat ab omni Venere illicita*), I recollect that a courtier told me the other day that the Cardinal, two years before his death, still kept three mistresses. The first of these was his niece, Marie de Vignerot, otherwise known as Madame de Combalet and to-day as Madame la Duchesse d'Aiguillon. Her father was one of the spies of the Marquis d'Ancre with a salary of one thousand livres per annum, and her grandfather was a notary at Bressuyre, a village of Poitou. The second was the Picarde, wife of M. le Marechal de Chaunes (brother to the Constable de Luynes), who died here four days ago, a short time after having been cut for stone in the bladder. The third was a certain pretty girl of Paris named Marion de l'Orme, whom M. de Cinquars, (who was executed at Lyons in 1641 with M. de Thou), M. le Marechal de la Meilleraye and several others had kept. She is still popular and has even become historical for her beauty, since Vittorio Siri has spoken of her in his *Mercure*. Undoubtedly these gentlemen of the red hat are good asses, *Vere Cardinales isti sunt carnales*."

I suppose the "*Mercure*" was the journal of that title which appeared at Paris as early as 1613, though the "*Gazette de France*", first published by the physician Theophraste Renaudot in 1631 and still maintained, is commonly regarded as the beginning of regular journalism in France. Patin's denunciations of the corruption of the clerical profession have the genuine ring of honest opinion, though it is quite possible that such circumstances as are described in the extract next following may have lent some acerbity to his expressions.

"Yesterday I was called, with two of my colleagues, to a consultation in the case of a man aged thirty-four, who was grievously ill. He was entirely covered with a livid purple and violet eruption, had been for three days tormented with nasal hemorrhage and a sharp continued fever, and was very drowsy and exceedingly weak. Although this was the eleventh day of his sickness he had been bled only four times, and, unfortunately for him, he was in the hands of a bad doctor, a monk, who pretended that his nasal hemorrhages were the indication of a crisis.

Never was a cowed head fit to practice our profession! He had given the patient some confection d 'alkermes as a strong cordial, an entirely false idea in continued fevers and in almost everything else, and I fear he will not survive the fourteenth day."

Patin was not the man to bear such interference with resignation, and I doubt not that his natural dislike of the clergy was accentuated by their dabbling in the business of the doctors of medicine.

Notes and Comments.

Dr. Hunter Robb has purchased a home in Nottingham, O.

Dr. Edward Lauder has been appointed Consulting Oculist to the Cleveland City Hospital.

Dr. John N. Lenker has been appointed Consulting Laryngologist to the Cleveland City Hospital.

Dr. Walter G. Stern, who has lately returned from Vienna, has opened an office in suite 516 Rose Building.

Dr. F. E. Bunts spent the 21st and 22d of November in Chicago attending a meeting of the American Railway Surgeons.

Mr. and Mrs. Sidney Word, of San Francisco, Cal., announce the engagement of their daughter, Miss Eleanor Word, to Dr. Cullen F. Welty, of this city.

The Funeral of Professor Albert. The funeral of Professor Edward Albert, of Vienna, was a most imposing function, thousands, being in attendance from all parts of Austro-Hungary. Several hundred floral offerings were received from various societies, and delegations attended from all the various medical organizations in Vienna, and from all the more important medical societies in the kingdom.

Honor for Dr. Stengel. The Board of Managers of the Pennsylvania Hospital, at a meeting Monday afternoon, October 29th, elected Dr. Alfred Stengel visiting physician, to succeed the late Dr. Da Costa. Dr. Stengel is physician to the University and Children's Hospitals, director of the Pepper Laboratory at the University of Pennsylvania, professor of clinical medicine at that institution, editor of the *American Journal of Medical Science*, and author of *A Textbook on Pathology*. He was graduated from the University in the class of 1889.

At the last meeting of the St. Louis Academy of Medical and Surgical Sciences the following officers were elected for 1901: President, Dr. Emory Lanphear; Senior Vice President, Dr. Carl Pesold; Junior Vice President, Dr. H. S. P. Lare; Secretary, Dr. O. L. Suggett; Treasurer, Dr. G. M. Phillips; Orator, Dr. Wm. Porter; Librarian, Dr. H. G. Nicks.

The Mississippi Valley Medical Association will meet at Put-in-Bay, Ohio, Sept. 10-11-12, 1901. The officers elected at last meeting are: Pres. A. H. Cordier, Kansas City, Mo.; Vice Pres. C. F. McGahan, Aiken, S. C., Chas. L. Minor, Asheville; Secretary, Henry E. Tuley, Louisville, Ky.; Treas. Dudley S. Reynolds, Louisville, Ky.; Chairman of Committee of Arrangements, J. C. Culbertson, Cincinnati, O.

Antitoxin Dosage. The dosage of antitoxin should be regulated rather by the extent of the disease and the length of time it has existed than by the age of the patient. Dr. Koester considers that 2,000 units should be given to mild cases; from 3,000 to 4,000 if the uvula and tonsils are affected; from 4,000 to 5,000 if the nares are involved. All laryngeal diphtheritic affections must, of course, be considered as severe cases and must receive the higher doses. If the diphtheric deposit on the pharynx fails to disappear, then the dose of antitoxin should be repeated, but not otherwise. In all septic conditions from 5,000 to 6,000 units of antitoxin should be given at once.

The Living Age for 1901. During the fifty-seven years of its existence this sterling weekly magazine has steadily maintained its high standard. It is a thoroughly satisfactory compilation of the most valuable literature of the day, and as such is unrivalled. As periodicals of all sorts continue to multiply, this magazine continues to increase in value; and it has become a necessity to the American reader. By its aid alone he can, with an economy of time, labor and money otherwise impracticable, keep well abreast with the literary and scientific progress of the age, and with the work of the ablest living writers. It is the most comprehensive of magazines, and its prospectus for 1901, which appears in another column, is well worth the attention of all who are selecting their reading matter for the new year. The Living Age Company, Boston, are the publishers. The offer to new subscribers is particularly inviting.

Hacking night coughs are due to nasopharyngeal obstruction.

To Study the Plague in Glasgow. Professor K. Muller, Professor O. Pertik, and Dr. E. Frank, of Buda-Pesth, have been sent by the Hungarian Government to Glasgow to study the plague.

Vomiting, depending for the most part on asthenia, and occurring in debilitated subjects, particularly females, can be more certainly arrested by strychnine, hypodermically or otherwise, than by other means.

Orthoform for Toothache. Hildebrant (*Ther Monatsh.*) asserts that orthoform instantly and completely relieves the severe pain due to inflammation of the pulp in a decayed tooth, it being applied in alcoholic solution on cotton.

Typhoid Fever. A malignant form of typhoid fever has developed in an epidemic form at Brazil, Ind. Seven cases were reported recently. Four deaths have resulted, and several patients are dangerously ill. Similar reports come from Sumpter, Mich., but the reports from Racine, Wis., are that the conditions there were greatly exaggerated and that but few deaths have occurred.

Cocaine in the Treatment of Intestinal Worms. One of the inconveniences attending the use of the anthelmintics ordinarily employed, particularly of extract of male fern, consists of the vomiting following the taking of the medicament. In a case of this kind where the extract of male fern was not well borne by the stomach, Flesh had recourse to the administration, in addition to the male fern, of a solution of cocaine, of which the patient took a few drops from time to time in a little water before and during the ingestion of the capsules of extract of male fern. The solution of cocaine Flesh employed is formulated as follows:

R	Cocaine.....	.15	(grs. 2¼)
	Ext. belladonna .....	.20	(grs. iii)
	Aqua valerian.....	.10	(ʒiiss)

The patient took in all 5 centigrams of cocaine. A purgative, calomel, given some hours later, brought about the expulsion of the tenia. The patient was kept in bed during the twenty-four hours that the treatment lasted.—*Le Presse Medicale*, Sept. 15, 1900.

To make Vaccination Compulsory in Colorado. An ordinance may be added to the laws governing the city of Denver, Col., making it compulsory for adults to be vaccinated. At present the law only pertains to children.

On Oct. 29 the entire building of the M. J. Breitenbach Company, manufacturers of "Gude's" Pepto-Mangan, was destroyed by fire. With characteristic American energy they expect to be in shape for work in 10 days.

Extraoral Diphtheria. It is often noticed in houses where children are down with diphtheria that other children suffer from nasal discharges or from eye discharges in which, not infrequently, diphtheria bacilli are found. An injection of antitoxin will at once put an end to the discharge and this therapeutic test is the best proof of the real origin of such discharges.

One of the most unique announcements in Polk's Medical Directory for 1900 is that of Dr. Joseph Marriott of Murray, Utah, who gravely announces: "My specialty is diphtheria, erysipelas, cramps, colic, bruises and the fevers." Verily, a new specialty is born every day. Another specialty of interest is that of Dr. Elzie Emmett Grey, of Indianapolis, who declares that her "practice is limited to diseases of cancer."

Suprarenal Extract and the Heart. Much has been written about the so-called constitutional effects from the internal use of the suprarenal extract, but very little reliable clinical data have yet been furnished. S. Floersheim (*N. Y. Med. Jour.*, Oct. 6, 1900,) has experimented with several normal and abnormal cardiac cases with the idea of determining what effect, if any, the drug has upon this important organ. When the powdered suprarenal is placed on the tongue, mixed with the saliva and chewed thoroughly, he has found it to show its effects within ten seconds; at other times it has required ten minutes. He has not seen a case with a weak irregular pulse in which the effects were not manifest within ten minutes. Although the action of the drug is very rapid, its effects have passed off as rapidly, and the changes in the heart's action never seem to be at all permanent. Upon the normal heart no influence has been detected after the administration of this drug, and the normal pulse in cases of organic disease is likewise unaffected. Dr. Bates believes it to be the most powerful known stimulant of the heart, but admits that its action is only temporary.

In Appendicitis, even though the temperature be normal or only slightly elevated, it is generally conceded that an operation is indicated when the combination of a rapid pulse and respiration exists.—*Medical Record*.

Justice McLean, in the Supreme Court, recently dismissed the complaint of a butcher against a firm of druggists on Eighth Avenue, to recover \$10,000 damages, because one of the firm's clerks treated his injured finger and made it worse. Justice McLean held that druggists and drug clerks have no license to practice medicine and surgery, and that the complainant sought advice from the clerk in this case at his own risk.—*Medical Record*.

Should Consumptives Marry? Mr. Edmund Owen, M. B., London, in the course of an address delivered before the Canadian Medical Association at Ottawa, spoke of the above subject as follows: "The extermination treatment of tuberculosis is a subject in which every member of the community should be encouraged to take personal and intelligent interest. It is a great mistake to allow it to be regarded merely 'a doctor's question' and to wage a successful war of extermination the attack should be begun right early. It is a question which is of vital importance for the nursery, the school-room, the dwelling-house, the store, the office, the barrack, in fact it concerns every department and every period of life. The disease is everywhere, and its eradication is, therefore, a matter of concern to every one. It has not yet been shown that the offspring of tuberculous parents are born actually tuberculous, but it is beyond question that they are very prone to inherit a peculiar physical condition which renders their tissues an easy prey to the germ of the disease. The family history of many patients who, at the threshold of life, become the subjects of enlarged glands or of chronic affections of the bones or joints, gives incontrovertible evidence of there being a marked hereditary disposition in the matter of tuberculosis. So comes the question, ought there to be a law preventing those who are undoubtedly tuberculous taking upon themselves the responsibility of parentage? There are some who would answer this affirmatively and without hesitation. But what would the church in general say to it, and what would the tuberculous minister in particular say to it? He would tell us that he reads in the very beginning of his book that he is to be 'fruitful and multiply,' and to do him justice it must be admitted that in Eng-

land, at any rate, he does his best to carry out this instruction to the very letter. But let him finish his injunction, man was to be fruitful that he might replenish the earth. Now, though I do not claim to be in possession of peculiar knowledge on this point, I cannot think that the architect of the universe who 'saw everything that he made and behold it was very good' could have desired that this beautiful world was eventually to be stocked with so large a proportion of tuberculous rubbish. I am fully conscious of the fact that I am advancing a somewhat extreme view, but surely the subject enters very largely into the question of prophylaxis. It is one, moreover, that will have to be deliberately approached and dealt with some day and that perhaps soon."—*Medical Record*.

A Bacteriological Tragedy.

A gay Bacillus, to gain his glory,
Once gave a ball in a laboratory.
The fete took place on a cover glass,
Where vulgar germs could not harass.
None but the cultured were invited
(For microbe cliques are well united),
And tightly closed the ballroom doors,
To all the germs containing spores.
The Staphylococci first arrived—
To stand in groups they all contrived;
The Streptococci took great pains
To seat themselves in graceful chains;
While somewhat late, and two by two,
The Diplococci came into view.
The Pneumococci, stern and haughty,
Declared the Gonococci naughty,
And would not care to stay at all
If they were present at the ball.
The ball began, the mirth ran high,
With not one thought of danger nigh.
Each germ enjoyed himself that night,
With never a fear of the Phagocyte.
'Twas getting late (and some were "loaded"),
When a jar of formalin exploded,
And drenched the happy dancing mass
Who swarmed the fatal cover glass.

* * * * *

Not one survived, but perished all
At this Bacteriologic Ball.

—J. Lee Hagedorn, M. D., Los Angeles,
in *Southern California Practitioner*.

Technic of Injections. Many people have the habit of making the antitoxin injections into the muscles of the back. This sometimes produces discomfort, however, and there is some slight danger, if the child should move, of the hypodermic needle entering the pleura or injuring some of the internal viscera. If the injection is made into the gluteal muscles these objections do not hold. The child may be easily and firmly held in the requisite position by placing it across the knee with its legs between the doctor's knees. The injections in the gluteal region may be made so deeply as to leave no swelling, whereas in the back swelling remains for some time.—*Medical News*.

Gift of Dr. Senn. Dr. Nicholas Senn recently gave to Rush Medical College \$50,000 which insures the beginning of a building project which will give the College the finest and best equipped structure for clinical work in the West. Architecturally the structure will follow the Italian Renaissance, the first few stories being of stone, and the four upper stories of terra-cotta and brick. The recitation room and the dispensaries will occupy the first, second and third stories. They will be equipped with all the latest improved medical and surgical appliances. On the fourth floor will be the laboratories. Their equipment will be the finest and most modern. The fourth floor will be connected with the Presbyterian Hospital Building by a covered bridge. Two amphitheatres for clinical work, capable of seating 150 students, will occupy the fifth floor.—*Medical News*.

Medical Graduation of Women. By a recent decision of the German Federal Council female medical students are entitled to be admitted to the State examinations in medicine, even if they have passed their preliminary examinations and received their medical education in Switzerland. As the State examinations in medicine begin in November, the medical men of Germany will very soon have the opportunity of meeting female practitioners, the number of German female students in Switzerland being rather considerable. Those ladies also who have already settled in Germany with Swiss diplomas will now be in a position to take German qualifications by passing State examination, without being forced to begin their curriculum again. The present favorable disposition of the government toward medical women has led to the rather absurd situation that female medical students enjoy privileges as to study abroad which are refused to the male sex.—*Lancet*.

Orthoform. In nose and throat work, the reports of the use of this drug have been almost universally favorable. Brocq, however, has found orthoform sometimes irritating and capable of exciting hyperemia and pruritus. In one case, a one-to-forty ointment caused swelling and redness lasting three weeks. Asam reports nine cases in which it produced inflammation, and Mirowsky observed a case of moist gangrene following the application of a five-per-cent ointment.—*Year Book of the Nose, Throat and Ear.*

The time-honored practice of shaving the scalp to put a stop to falling out of the hair, in which the laity have great faith, seems to have been losing favor with medical men of late years, but in the *Monatshefte für praktische Dermatologie* for October 15th we find an article by a Turkish physician, Dr. Menahem Hodara, of Constantinople, who reports excellent results from the practice in a number of cases. He has the head shaved once or twice a week from five to ten times, and directs cleansing and stimulating applications in the intervals.—*New York Medical Journal.*

The Effect of Modern Education upon Children. The stress of modern education has enormously taxed the brains of children by the multiplicity of studies. Children cannot assimilate the ideas in widely differing departments of knowledge at one and the same time. The effort to do so deranges in many instances the entire nervous system of the child. The so-called nervous child is not only not normal, but may be the victim of the education methods of the present day. The examination system is often a horror to such a child, as the writer knows from his own experience. The studies required of the growing child should never be allowed to disturb the health or interfere with proper rest and exercise. The modern city child seems to be unable to endure the burdens of civilized life as easily as did the children of the past, who were brought up in the country and spent the greater part of time in the fresh open air. Whether our fathers were more hardy and robust as children than the progeny of the present generation may be an open question, but certainly the conditions of civilized life have so completely changed that at the present day mental and physical education possess equal importance for the growing child. The mind of the child to-day is too often developed at the expense of its vitality and health.—*W. M. D' Aubigne Cahart, M. D.*

Dislocation of Shoulder. The rare backward dislocations of the humerus are best reduced in the following manner: The arm is raised to a right angle or the horizontal, extended, rotated, and then adducted, while at the same time the head is forced into the glenoid cavity by direct pressure from behind. If this is not successful, reduction is sometimes accomplished very easily by strong abduction of the arm with subsequent rotation inward, or by elevation of the arm and pressure of the head into the cavity.—*Tillmann's Text-Book of Surgery.*

Contraindications of Strychnine. Now and then one sees in the literature (though less frequently than formerly) that strychnine is indicated in paralysis. Such a statement is about as valuable as to say that a certain remedy is good in heart disease, or dropsy, without further specification as to the indications to be met by the particular remedy. Strychnine is a powerful remedy when given in full physiological doses of one-twentieth to one-twelfth of a grain three or four times a day. In certain forms of paralysis it is useful, but its value is largely confined to those due to involvement of the peripheral nerves, or in which the weakness is due to one of the varieties of progressive muscular atrophy. In paralysis of central origin it is of doubtful efficacy, if it does not do harm in many cases. We think that the untoward effects of strychnine in central lesions would have been much oftener described in books if it had not been for the fact that the strychnine was given in too small doses. Tonic doses of strychnine, those ranging from one-sixty-fourth to one-thirty-second of a grain, are quite devoid of effect upon the vascular and nervous apparatus, and the drug, when administered in such dose, has very little effect, either for good or for evil.

If given in large doses after hemiplegia, there is certainly danger of the increased blood-pressure leading to a second rupture of the weakened arteries, providing the case is one of cerebral hemorrhage. If, however, it is due to thrombosis, there would probably not be the same danger, but the primary conditions underlying both thrombosis and hemorrhage are so nearly alike that it is easily possible that in certain patients who have had thrombosis it may result in hemorrhage. Strychnine in full physiological doses is usually contraindicated in all forms of hemiplegia. Most writers are agreed that it is contraindicated in tabes, and the literature contains numerous references to patients who have been made distinctly worse by large doses.—*Medicine.*

Iodides in Locomotor Ataxia. Roux, in a recent work on the sensory visceral derangements in tabes shows that iodide may irritate the stomach, alter the mucosa, and cause gastritis, with serious consequences. The pain is felt in the lower thorax, especially the left side, and may be severe; it is felt an hour or two after eating, increases gradually, and then disappears before the next meal. Vomiting may ensue, and persistence in the iodide may finally produce typical gastric crises. These are distinguished from true crises by their gradual onset and disappearance, by their development after gastric irritation or at the menses, and by their suppression with a milk diet and discontinuance of the iodide.—*Journal of Nervous and Mental Disease.*

The "Decinormal" Salt Solution. We receive from time to time letters inquiring why the saline solution used for intravenous injection is called "decinormal." The reason is, as was explained by Dr. J. B. Nichols, of Washington, in the *Medical Record* of August 14, 1897, that a normal solution in volumetric chemistry is a solution containing in 1,000 c. c. an amount of the active constituent just sufficient to combine with or replace 1 gm. of hydrogen. In the case of sodium chloride this amount is 58.37 gm., hence a normal saline solution is one containing 58.37 gm. to the litre of water. A solution one-tenth of this strength (a "decinormal" solution) contains 5.837 gm. to the litre, which is just about the strength of the saline solution used for venous infusion.—*Medical Record.*

Mustard as a Substitute for Electricity.—A number of people in and about Rochester, N. Y., have been imposed on during the past week by a slick stranger, who had what he called an electric belt, which was guaranteed to cure any number of diseases by simply wearing it. Those who have done so say that they could feel a burning sensation, but that they did not get the promised relief, and finally one belt was dissected, when it was found that the "electricity" was generated from a strip of mustard plaster under a covering of thin cloth. It is not known how many were taken in by this slick individual, for people as a general thing do not like to acknowledge having been duped, but it is believed he did a good business.

Counter-Irritants.

In a neighboring town a Salvation Army advertiser wrote on a billboard, "What shall I do to be saved?" A patent medicine man came along and wrote underneath, "Take Carter's Little Liver Pills." Shortly afterward the Salvation Army man noticed the sacrilegious work of the medicine man and printed below, "And prepare to meet thy God."

A head adorned with shaggy and unmanageable whiskers was thrust out of the window, and a voice that fitted with the beard inquired:

"What is it?"

"Oh, is this Mr. Higgins?" came a shrill voice from the shade of the doorway below.

"Yes"

"Please come to 414 High Street, just as quick as you can, and bring your instruments."

"I ain't no doctor; I'm a carpenter. Dr. Higgins lives in the next street," and the window came down with a slam that told of former experiences of the same kind on the part of the humble artisan.

But Mr. Higgins had not got comfortably back into bed before the bell rang again, and, uttering some forcible remarks, he rose once more and went to the window.

"Well, what do you want now?" he ejaculated.

"Please, sir," said the little voice, "it's you we want; pa and mar is shut up in the folding bed, an' we can't get 'em out."

Simkins: What makes your nose so red, Timkins?

Timkins: It glows with pride, sir, at not poking itself into other people's business.

A Composite Profession.

Dr. Adam H. Wright, in his President's address before the Ontario Medical Association, calls attention to the following advertisement, taken from a newspaper of Shakespeare's time:

WANTED—In a family who have had bad health, a sober, steady person in the capacity of doctor, surgeon and man-midwife. He must occasionally act as butler and dress hair and wigs. He will be required sometimes to read prayers, and preach a sermon every Sunday. A good salary will be given.

THE Cleveland Medical Gazette

JANUARY, 1901.

Original Articles.

Symposium on Appendicitis.

PAPERS PRESENTED AT THE MEETINGS OF THE CUYAHOGA
COUNTY MEDICAL SOCIETY, IN CLEVELAND, ON
THE EVENINGS OF THE 4TH AND 18TH
OF OCTOBER, 1900.

(CONTINUED FROM PAGE 92.)

COMPLICATIONS DURING APPENDICITIS.

BY MORRIS D. STEPP, M. D.

Instructor in Surgery, Cleveland College of Physicians and Surgeons.

According to most later authors appendicitis is divided into the simple catarrhal and the ulcerative form. All digressions from these two original subdivisions must be regarded as complications. First of all may be considered the frequent change from the catarrhal into the ulcerative form. This happens in almost all cases of recurrent appendicitis at some time or another, if left to themselves, followed by the clinically more important form of perforation. Although the ulcerative form generally makes itself manifest in the production of all the usual symptoms, many cases have been observed and reported in which they were absent entirely or so insignificant as to be out of all proportion to the gravity of the lesion. Osler reports eleven instances occurring in typhoid and phthisis with no clinical indication whatever. Ulcerations if not a complication of the catarrhal form result from the presence of foreign bodies or foecal concretions, distention of

the lumen with fluid, torsion of the appendicular artery or from direct infection. Nature's effort to combat the pathological changes becomes evident usually before perforation has occurred, inasmuch as a localized peritonitis follows in the region of the appendix and adhesions have enveloped it entirely or at least protected it at the points where the greatest changes were taking place.

Should perforation then take place the disturbance might be only slight and followed by resolution, or it might go on to the formation of a circumscribed abscess cavity. Dependent upon the position of the appendix, the coincidental formation of adhesions or the direction of least resistance, this abscess may be either intra or extra peritoneal, pericaecal, pelvic, perinephritic, lumbar, hepatic and even penetrate into the pleural cavity. As will be readily seen a vast number of complications arise in these instances and all according to the position of the abscess cavity. The function of any organ which becomes involved in this destructive process would be either partially or entirely destroyed.

Although not common, it has been frequently observed when the abscess cavity is situated high up, that we have, added to our usual symptoms a high grade of icterus due in most instances of course, to pressure upon the biliary passages, but in others to an invasion of the liver substance itself. In the case of the kidney, pyelonephritis is by no means rare, and that the right ureter is not more commonly involved must be due to the fact that the constant flow of urine tends to keep its lumen open. Should the appendix have the so-called retrocolonic position, the resulting abscess would be extra peritoneal and might follow beneath the sheath of the iliacus fascia and make its way into the neighborhood of Poupart's ligament where external perforation and recovery have occurred. If the retroperitoneal tissues of the flank are involved a perinephritic abscess results, reaching in this instance immense proportions. In a case under the care of Gardner of Montreal it displaced the diaphragm to the second rib and containing air it produced symptoms of pneumothorax. Faecal pleural fistulae are also reported following retroperitoneal abscesses.

Perforations into the bladder have occurred repeatedly, both when the abscess was extra peritoneal or when intra peritoneal, and cases are reported where the cavity has extended along the psoas muscle, penetrating to the hip joint or to the rectum, perineum or scrotum. A large gluteal abscess has been known to follow the burrowing of pus through the obturator foramen. Per-

foration into the bowel is more common than perforation into the bladder and adds to the list of complications that of hemorrhage. Intestinal hemorrhages causing death have occurred in appendicitis with the same rapidity that is seen in the most virulent form of typhoid and should be remembered when taking into consideration the medical treatment of this disease. Hemorrhage from the appendicular artery during the course of the disease is of very rare occurrence on account of the usual, early adhesions and the agglutination power of the exudate. Where a large portion of the caecum has been involved in a circumscribed abscess, the appendix has sloughed off and passed per anum. In perforative appendicitis adhesions are the rule, yet this depends to a certain extent upon the virulency of the infection or the rapidity of perforation in an already, oftentimes damaged appendix. The latter may, therefore, after perforation has been established, hang loosely within the peritoneal cavity without the intervention of any profilactic wall which would guard against the continuance of infection. In this case we should have to deal with that gravest of all complications, suppurative peritonitis which opens the way for metastatic abscesses in any part of the body or for a general systemic intoxication. A general, simple, inflammatory peritonitis may develop by extention from a localized area and from which the patient may, and very often does recover, but the suppurative form of peritonitis usually proves fatal and especially so in children.

Endocarditis in the course of an appendicitis is due to the introduction into the heart of septic emboli containing micro organisms identical with those found at the seat of the original infection and follows usually a septic peritonitis or circumscribed abscess of the appendix. Through the elimination of toxic materials and for the same reason that endocarditis occurs, do we occasionally come across a septic nephritis with all its attendant symptoms. The sudden secession of pain with or without lowering of temperature should always call attention to the possibility of gangrene brought about, either through the pressure of fluid confined within the lumen of the appendix, one or more faecal concretions or strictures, or by compression or torsion of the appendicular artery. Both in the onset and during the course of the disease constipation oftentimes amounting to an impaction is common.

This is due in all probability to an inflammatory involvement of the intestine or to an impairment of the nervous mechanism supplying the power of peristalsis. Probably the most frequent cause of intestinal obstruction is the formation of bands of ad-

hesions which sometimes rapidly close the lumen of the intestine or in other instances not until contraction following the termination of inflammation takes place. Phlebitis in one or the other extremity with thrombosis of the iliac or femoral vein is quite frequently noticed and may occur during the course of the disease, but is more usually seen after an operation. No good reason has been ascribed for this, since it may follow an aseptic operation in the quiescent stage and occurs as frequently upon the left as upon the right side.

APPENDICITIS AND TYPHOID FEVER.

BY CHARLES J. ALDRICH, M. D.,

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It is quite certain that typhoid fever bears an etiological relation to appendicitis. Keen (1) seems to be impressed with this fact, but does not advance any evidence to support the contention. Deaver (2) says, "I believe typhoid fever to be one of the remote causes in the production of appendicitis." Hare (3) says, "In all probability typhoid fever predisposes a patient to appendicitis." Rolleston (4) found changes in the appendices of fourteen out of sixty cases of enteric fever seen in St. George's Hospital, London; in two there was perforation, in seven ulceration and in five tumefaction. Hopfenhausen (5) observed and studied the appendices found in thirty cases of typhoid fever and concluded from their study that changes in typhoidal appendices are always present. These changes are most marked in the earlier stages of the fever and consist chiefly in cellular infiltration. She believes that specific typhoidal ulceration is rare and usually insufficient to produce a severe form of appendicular disease. The same observer (6) found eight cases of perforation of the appendix in 808 cases of typhoid fever. In two of these cases a correct diagnosis was made before death; the third caused a perityphlitis which was found post mortem. From a continuation of her interesting investigations on the subject, we quote the following statistics (5) in regard to 743 cases of appendicitis, 37 of which were supposed to be caused by typhoid fever:

	No. of cases proceeding from typhoid fever.	No. of cases observed.
Hospial cantonal de Lausanne..	9.....	200
Sonnenburg	6.....	130
Pozzi	1.....	1
Bull	3.....	12
Hecker	1.....	35
Bossard	2.....	26
Douneff	4.....	52
Le Guern	1.....	110
Jacobson	2.....	6
Schnellen	1.....	32
Langheld	4.....	112
Hohn	1.....	2
Jacob	2.....	25
Total	37.....	743

Careful study of these statistics throws considerable doubt upon their value in establishing the relationship.

The appendix contains solitary glands which may become diseased from typhoidal infection and produce any grade of specific change, from congestion to perforation. The healing of these ulcers may cause cicatricial contraction and thus close or narrow the lumen of the appendix, which favors the development of future disease. It is also well known that the appendix contains considerable lymphoid tissue which is particularly susceptible of typhoidal infection and inflammation. The irritative processes set up by such changes as described by Hopfenhausen and referred to in the preceding sentences, may continue and develop a chronic appendicitis. Such cases have been reported, and as we study the question more closely will undoubtedly multiply.

The extreme paucity of the literature on the subject of disease of the appendix in typhoid fever is probably due to the fact that the organ has been neglected and not examined for specific lesions while making autopsies on those dying from typhoid fever. Keen (7) declared that every operator, while operating for intestinal perforation in typhoid fever, should never fail to examine the appendix and remove it if diseased. In his table of operations done for typhoidal perforation of the bowel, perforative lesion of the appendix is stated to have been found by Bontecou (8), Kimura (9) and Alexandroff (10). Fitz (11) has recently collected five cases of perforation of the appendix due to typhoid fever. Morin (12) found twelve cases of perforation of the appendix in sixty-seven cases of perforation of the bowel in typhoid fever; Heschl

(13), eight appendicular perforations in fifty-six cases of typhoid fever.

Fitz and Hare have both remarked that perforation in typhoid fever in the appendicular region is more likely to be followed by recovery than if the perforation occurs elsewhere. Fitz has also asserted that when the symptoms of perforation closely resemble an appendicitis the prognosis is more favorable.

That typhoid ulcers occur in the appendix is certain, and it is quite possible that they occur more frequently than the literature leads us to believe. Stengel made a verbal report at the meeting of the Pathological Society of Philadelphia, of several instances in which typhoid ulcer has been found in the appendix. Sailer and Riseman also mentioned its occurrence in a case observed.

I feel that we are now in a position to make, with some degree of assurance, the following statements in reference to the relation of appendicitis and typhoid fever.

(1). Appendicitis may occur as an accidental complication of typhoid fever, and as such bears no other relation to the typhoidal infection.

(2). Appendicitis may occur during the course of typhoid fever and be caused by conditions engendered by both local and general infection by the bacillus of Eberth.

(3). Not a few of us meet with patients who are suddenly taken ill with symptoms unmistakably appendicular in character, but which gradually subside and are merged into a typical typhoid which then runs its usual course.

While the occurrence of an appendicitis in the course of typhoid fever, may be accidental or casual, yet it is the third condition mentioned which is most puzzling to the physician, and demands a great deal of care and a high order of skill to prevent him from falling into the lamentable error of advising an operation upon an appendix which is unfortunately situated near, and irritated by specific lesions in and about the head of the colon.

The following case will illustrate some of the difficulties in diagnosis as encountered in the third of the conditions referred to:

E. O., a slight fair-haired girl of nine years, was taken suddenly ill with a severe pain in the right iliac region which was accompanied by nausea and vomiting. The temperature was found to be $103\frac{1}{2}$ degrees in the axilla and the pulse 120 to the minute. The patient lay with the knees drawn up, face flushed and tongue slightly coated. There was some general tenderness over the abdomen, but pressure over the cecum produced more decided

pain and there seemed to be a slight rigidity of the muscles on that side. No defined mass could be felt, but resistance existed in the neighborhood of the appendix. Careful examination of the patient failed to make matters more clear and the persistent search for a cause of her illness lent to the family part of my own anxiety. Pressed for a diagnosis, I informed them that there were symptoms of appendicitis. A neighbor who had recently returned from a successful operation for appendicitis, and naturally impressed with the importance of an operation in all cases and at the earliest possible moment, caused the parents of the little girl to insist upon a consultation with a surgeon, and Dr. Parker was called seventy-two hours after the beginning of the attack.

About four hours preceding his visit a free movement of the bowels was secured and the little patient seemed to have lessened tenderness and fewer symptoms of appendicular inflammation. At this time some specimens of blood were taken, but were not examined until later. Dr. Parker was decidedly of the opinion that no appendicitis existed, although there was some tenderness still present in that region; neither did we strongly suspect typhoid fever. In fact, the bright eyes, the high temperature, rapid circulation and flushed cheeks of the little patient caused Dr. Parker to remark on the possibility of a beginning scarlet fever. In a few days we had a development of rose spots and the case ran a typical and mild course of typhoid fever and recovered after about four weeks' illness. Examination of the specimens of blood which were taken at the time mentioned, did not give a reaction to the Widal test but revealed an absence of leukocytosis, which supported the opinion that it was not an appendicitis, and caused a suspicion of typhoid, although the spleen could not be palpated. One week later the agglutination test was marked.

In this class of cases the aid afforded by a careful blood examination may be of the utmost importance and should not be neglected, since in appendicitis we are quite sure to find an increase of leukocytes, while in typhoid fever the opposite condition obtains. The Widal reaction is often met with quite early, and in those cases in which the history of a previous typhoid is not obtainable, its presence would be pivotal.

The second case which I will report was one of undoubted perforation in the region of the appendix in a patient who was sick with typhoid fever in the wards of the Cleveland General Hospital. Mr. L., with his wife and infant child, both of whom were very ill with typhoid fever, was sent to the hospital by Dr. Hobson

of Flushing. The mother was attacked with typhoid on the sixth day following her accouchement and died on the twenty-sixth day of her disease. The infant after an illness of many weeks recovered. Mr. L., although supposed to be well, was found to have a temperature the night that his wife and child were admitted. His spleen was enlarged, tongue coated, and a diagnosis of typhoid fever was made. He ran a very uneventful course of fever until the twenty-first day, when he was suddenly seized with a very severe pain in the right iliac fossa, developed the scaphoid belly, abdominal rigidity, and yet he did not seem to suffer from the amount of collapse and prostration incident to perforation of the bowel. He was seen by several members of the staff and all coincided in the diagnosis of appendicitis or typhoid ulcer of the caput coli or of the appendix itself. Although his condition was very precarious it was not thought best to make an operation, and notwithstanding a number of doubtful days he gradually began to gain strength, his fever disappeared and he made a complete recovery. Although the extreme rigidity of the abdominal muscles prevented very accurate palpation of the appendicular region, a mass was clearly demonstrable. Since seeing this case I have had the privilege of observing another patient in the wards of the Cleveland General Hospital which was undoubtedly typhoid. His wife while caring for him was stricken with the disease and was also in the wards of the hospital. During the course of his fever he began to complain of pain and tenderness in the right abdomen, a tumor developed, fluctuation appeared and an incision was made, evacuating a large quantity of pus whose odor testified to its intestinal origin. He made an uninterrupted recovery, bearing out Fitz's and Hare's dictum that a typhoid perforation in that region is more likely to be followed by recovery. The diagnoses of these cases were supported by all the facts and probabilities, yet they serve aptly to illustrate the saying of the witty Frenchman, "that no case is complete without a post-mortem."

I can conceive of no reason why the treatment of an appendicitis which exists as an accidental complication of typhoid fever should not be governed by the same principles observed in the treatment of a non-typhoidal patient. We are all aware that typhoid patients do not bear anesthesia and operation well, but when the abdominal cavity is threatened by a diseased appendix, the issue should be met and the offender removed. When, however, we have reason to believe that we have a typhoidal affection of the appendix occurring well along in the course of the fever,

we should consider carefully the possibility of the symptoms—pain, tenderness, muscular resistance, scaphoid belly-wall and mass in the right iliac fossa—all being due to typhoidal ulceration of the cecum and about the ileocecal valve. If one is familiar with the beautiful colored drawing of typhoidal ulceration of this part of the intestinal tract which is shown in the “Atlas of Pathology,” by Kast and Rumpfer, he will readily understand why all of the so-called classical symptoms of appendicitis may occur without the appendix per se being implicated. Few surgeons would care to face the possibilities incident to deep ulceration and possible adhesion in this region of the gut. Best lean upon the observation, that perforations in this region are usually preceded by adhesions which may be followed by localized abscess and recovery. Since not a few cases of typhoid fever begin abruptly with rather violent bowel affection and considerable soreness and tenderness, most marked in the right iliac region, it follows that some of these cases will present a most difficult problem for both the attending physician and consulting surgeon. We learn by our mistakes, and having erred and grown wiser, I now believe it possible to make a differential diagnosis.

(1). Surgical Complications and Sequels of Typhoid Fever, p. 156.

(2). A Treatise on Appendicitis, p. 34.

(3). Medical Complications, Accidents and Sequels of Typhoid and Enteric Fever, p. 146.

(4). Lancet, 1898, vol. I, p. 1401.

(5). Revue Med. de la Suisse Romande, Feb. 20, 1899. Etude sur l'etat el l'appendice vermiforme, dans le cours de la fievre typhoide.

(6). Revue Med. de la Suisse Romande, Feb. 20, 1899.

(7). Surgical Complications and Sequels of Typhoid Fever, p. 231.

(8). Jour. Amer. Med. Assn., Jan. 28, 1888, p. 106.

(9). Sei-i-kwai Medical Journal, 1890, ix. 55.

(10). Report of Hospital St. Olga, in Moscow, 1890, p. 198.

(11). Trans. of Assn. of Amer. Phys., 1891.

(12). These de Paris, 1869.

(13). Schmidt's Jahrbucher, 1853, lxxx. p. 42.

APPENDICITIS IN CHILDREN.

BY JOSEPH V. KOFRON, M. D.

That the appendix vermiformis is often affected in children is evident from the fact that about 25 per cent. of all cases of appendicitis occur before the 15th year. While appendicitis is considered rare before the fourth year, it occurs in about 45 per cent. of the cases between the fourth and ninth year and about 50 per cent. between the tenth and fifteenth year.

It is much more common in the male than female, the average being about 70 per cent. males and 30 per cent. females.

I shall not dwell upon its anatomy except to mention that the appendix is found comparatively larger in the child than in the adult. It is also comparatively smaller, i. e. it is shorter, has a smaller caliber, has a greater blood supply in the female than in the male. Its position is very variable.

Etiology: The most prominent predisposing causes are: Age, sex, its variable position and blood supply and its size, also twists, kinks, and other anatomical peculiarities.

The most common exciting causes are: Lodgment of fecal matter, foreign substances such as pins, worms, seeds, and other material, traumatisms, typhoid fever, diarrhoea, indigestion and constipation.

The latter is thought to be a very frequent cause in children.

The bacillus most frequently found in appendiceal abscess is the bacillus coli communis and it is probably the prime factor in the production of appendicitis.

Children suffer from catarrhal, ulcerative or perforative appendicitis, and the most common termination is that in abscess, with general peritonitis second, and resolution last.

Recurrent attacks are probably not as frequent in children as in adults.

Symptoms and Diagnosis: Pain, vomiting, diarrhoea or constipation, fever, rapid pulse, resistance of the recti, localized tenderness, tympanitis, respiratory difficulty and sometimes dullness on percussion localized in the right lower abdominal quadrant are the symptoms most commonly present.

Pain is a very constant symptom, and it is usually described as sharp, dull or aching; it is paroxysmal in character and quite persistent. Pain sometimes comes very early in the attack and may be very sharp but gradually diminishes, or it comes on quite late and increases in severity and frequency. While pain may be

referred to any part of the abdomen it is usually directed to the lower half and (especially if attention has been called to it) the right lower abdominal quadrant. It must be remembered that the character of the pain is no indication of the gravity of the attack and therefore it must be carefully considered along with the other symptoms.

Vomiting may sometimes be absent if there is diarrhoea, but it is usually present and is very complete, the stomach emptying itself without difficulty or retching. It may last only a short time, but is commonly quite persistent.

Constipation is much more frequent than diarrhoea and is sometimes very obstinate. Fever is usually present early in the attack and may reach to 105 degrees F., but usually it does not rise above 102 degrees F. It is very unreliable, as I have repeatedly seen severe attacks from the beginning and up to the time of operation go along with the temperature not raised above 100 degrees F. and again others considered mild attacks with the temperature raised to 104 or 105 degrees F.

While the pulse rate may remain normal or nearly so in some cases, it is found to be increased in the majority of the cases, especially at the onset.

Localized tenderness is usually present early and is one of the most important symptoms, especially if referred to the right lower abdominal quadrant; it usually remains even when the patient is free from all the other symptoms, and it is occasionally the only symptom supporting our diagnosis.

Resistance of the right rectus, occasionally of both recti, if associated with the symptoms just enumerated, is one of the most suggestive symptoms.

Tympanitis, when present early, will hinder us from making a satisfactory examination, and I have occasionally seen cases where an abscess was easily made out when the tympanitis was relieved, but could not be made out before. It is most frequently present in cases with marked constipation or when peritonitis is present.

Respiratory embarrassment is usually seen when peritonitis and adhesions are present, and when hiccough accompanies it is a most positive sign of adhesions and means a desperate case.

Dullness in the right lower abdominal quadrant is seen when adhesions between the intestinal coils and their covering occurs in the region just mentioned or when an abscess is present.

To recapitulate: Pain, vomiting, constipation, resistance of

the rectus with localized tenderness and dullness in the right iliac region are the most common and probably the most reliable symptoms we have.

Differential diagnosis: The differential diagnosis in children is between colic, indigestion, intussusception, typhoid fever and psoriasis.

Colic is usually distinguished by the absence of fever, the pain in colic being referred to the region of the umbilicus and is usually relieved by mild, persistent pressure, while pressure in appendicitis will increase the pain.

Indigestion in children is usually accompanied by high fever, the pain is generally referred to the epigastrium and diarrhoea is more frequently present than constipation, while the opposite is the rule in appendicitis.

While intussusception is usually accompanied with pain, vomiting and colic, there are also present tenesmus and bloody stools, no fever at onset and when a tumor is present it is usually on the left side. Typhoid fever may be mistaken at the onset, but the history epistaxis, coated tongue, headache, characteristic rise and fall of temperature, rose spots and often nervous symptoms will help to distinguish.

Psoriasis: In psoriasis there is usually some retraction of the lower limb, the general symptoms of appendicitis are absent, and it is rarely seen as compared with appendicitis.

Prognosis: The mortality is high, by some writers given as high as 45 per cent. General peritonitis being the cause of death in the great majority of cases, with pyemia second.

The treatment does not differ from that in the adult.

APPENDICITIS AND PELVIC DISEASES.

BY R. E. SKEEL, M. D.

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That appendicitis and disease of the pelvic organs occasionally co-exist is well known to all abdominal surgeons and although the relation existing between them has been investigated to a limited extent by Fowler and others, it has, so far as I know, never been thoroughly studied.

That a patient having pelvic disease should have an intercurrent attack of appendicitis or a patient with chronic appendicitis an attack of possible salpingitis, is no evidence that the same

cause led to both inflammatory conditions, the two then being perfectly independent of each other. The interesting question is whether they are always thus independent or whether appendicitis may lead to destructive inflammation of the pelvic viscera or disease of the pelvic organs to actual disease of the appendix.

With the appendix in its ordinary location, hanging over the pelvic brim, the tip is but a short distance from the right tube and ovary and there can be no question that perforation of this portion of the appendix with its resulting peritonitis, whether strictly localized or spreading over the entire pelvic cavity, must lead to the infection of the peritoneal surfaces of these organs. Similarly the peritonitis accompanying salpingitis, ovarian abscess and other forms of acute and sub-acute pelvic disease must at times involve the peritoneal surface of the appendix as it does other portions of the intestinal canal. Such involvement of the appendix, however, is not appendicitis and is upon the wrong surface of that organ to lead to serious trouble.

On the other hand I have never personally observed or heard of a case in which appendicitis with its accompanying abscess formation or spreading inflammation has led to destruction of the ovary or even permanent occlusion of the fimbriated extremity of the tube. That such a result is possible cannot be gainsaid, however, as the open end of the tube invites septic contamination from the interior of the abdominal cavity. That it is rare is proven by the fact that evacuation of abscess cavities and removal of the appendix results in almost certain and complete recovery, no complaint being heard of diseased uterine appendages after such an operation or even after spontaneous rupture and evacuation through the rectum. A considerable number of instances have been reported in which the appendix and tube or appendix and ovary or both have been fused in a common inflammatory mass and one marked example of that kind has come under my own observation. In such instances both organs have probably been removed without any effort being made to determine whether the removal of the one originally offending would have resulted in the resolution of the other. On purely clinical grounds I should be led to think that the instances in which appendicitis caused actual disease of the pelvic organs deeper than their peritoneal surfaces or vice versa must be extremely rare and that when a thickened tube and ovary involved in an inflammatory mass is found with appendicitis and caused by it, it is no more necessary to remove them than it is to resect a portion of the small intestine

for the same reason. On the contrary an appendix involved in such a mass having its primary origin in the tube should be removed because it is a useless organ and may give rise to future trouble.

The most important consideration in the whole subject, however, is that of differential diagnosis, for salpingitis rarely needs operative interference in the acute stage while appendicitis, to be extremely conservative, frequently does, and I know of no conditions in which accurate differentiation is under some circumstances and in the early stages more difficult. Of course salpingitis is not the only disease of the pelvic viscera which may lead to error; extra uterine gestation and puerperal lymphatic infection both sometimes being extremely misleading. Salpingitis is, however, the most common and it is fortunate that it is so rare as a primary disease or differentiation would be even more difficult than at present. Pelvic inflammation, the result of infectious disease of the tubes or ovaries, will ordinarily have been preceded by some suspicious evidence of gonorrhea, a septic labor, or induced abortion. Gonorrheal inflammation of the tubes is sub-acute in character, is usually bilateral, pain in the early stages is confined to the pelvis and so soon as a mass can be detected its location is characteristic.

Appendicitis is acute in onset, pain in the early stages, is epigastric rather than pelvic, and the well known point of tenderness over the origin of the appendix is usually well marked. Muscular rigidity is marked in appendicitis, much less so in peritonitis from tubal disease.

Septic pelvic peritonitis with or without involvement of the ovary and tube usually follows in such close relation to its cause that one is not so apt to be misled. That mistakes are possible is shown by the following case: Mrs. Annie L., aet. 20, was delivered by a midwife in December, 1899. She did well for several days and then began to have pain in the abdomen with fever and sweats. When I first saw her the temperature fluctuated between 101 and 103 degrees, the pulse was from 110 to 130, abdomen distended, vomiting and constipation were marked. Examination showed the cervix well closed, the uterus not large, no foul lochial discharge although it was rather free. No mass was to be detected in the pelvis. The case was considered to be one of lymphatic infection and was treated by the ice bag locally and strychnine and stimulants internally. No change occurring and the abdominal pain continuing an exploratory opening through the pos-

terior vaginal cul de sac was made, but revealed absolutely nothing. Much to my surprise the patient improved for a few days but the temperature, rapid pulse and abdominal pain soon recurred. At this time the pain was localized over the right side, and rigid diet with free evacuation of the bowels had reduced the tympany until it was possible to make out localized resistance in the upper part of the right iliac fossa. Incision here revealed the trouble, a small appendical abscess with a ruptured appendix behind the caecum. Evacuation of the abscess and the removal of the appendix led to complete although slow convalescence.

Gangrenous appendicitis with subnormal temperature and shock can scarcely be mistaken for any pelvic lesion except ectopic gestation with rupture and the history in these latter cases will usually put one upon the right track, a missed or delayed menstrual period with colicky pelvic pain almost always preceding the evidences of active hemorrhage.

Finally chronic appendicitis must be differentiated from pelvic neuralgia, that form particularly associated with so-called cystic ovaries and in which removal of the ovaries makes the patient's life more miserable than before. A chronically diseased appendix is subject to recurrent attacks of inflammation with vomiting and slight elevation of temperature; it is very frequently palpable as a hard cord under the examining hand, excepting of course when turned up under the caecum and tenderness can rarely be elicited by vaginal examination.

In pelvic neuralgia on the contrary fever is never present, palpation reveals several instead of one tender point, and a matter of the greatest importance, pinching the abdominal wall during bi-manual examination gives rise to as much distress as actual pressure upon the tubes, ovaries or appendix.

The treatment to be accorded to acute appendicitis should be modified in no way by the co-existence of pelvic disease and that treatment has been described fully by abler pens than mine. It is sufficient here for me to say that I believe every acute attack endangers life, that no man can say at the outset what attack is to be mild and what fatal, that consequently every case should be operated upon, *when the diagnosis is certain*, at as early an hour as possible, that this should be done in spite of the fact that over one-half will recover without operation and for the very good reason that the operation itself at an early date has almost no mortality rate. Of the cases which would die without operation a large proportion could be saved by early interference.

He would be a hardy operator indeed who would risk spreading septic mischief by operating upon chronic pelvic disease in the face of acute appendicitis either with or without abscess formation, but tubes and ovaries might be removed or resected as the case demanded and certainly should be so treated if the condition were discovered in the course of operation for chronic disease of the appendix. *

SURGICAL INTERVENTION IN APPENDICITIS FROM THE PHYSICIAN'S STANDPOINT.

BY JOHN H. LOWMAN, M. D.

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"No patient is safe unless his appendix is in his pocket," Roux (of Lausanne) makes one of his confreres say. It is a droll way of putting the dictum of the radical thinkers on appendicitis, operate at all times, under all circumstances, as soon as possible. Opposed to this is the teaching of the conservatives;—operate in the interim, when operation is safe. Between these extreme opinions are the opportunists, who suit the treatment to the individual case.

When to call a surgeon, means when is surgical intervention necessary. To answer this one must define to himself his position on the treatment of this disease.

The most radical advocate of immediate intervention today is Dieulafoy. He has, during the last few years, won over to his ideas most of the surgeons and many of the physicians of Paris. He says, "There is no medical treatment of appendicitis. At the first cry of alarm it is already too late, the canal is obstructed, a cavity is closed, and the toxic infection is started."

According to his school, an appendix touched is an appendix condemned. There is no compromise, and operation must follow immediately in the wake of diagnosis.

On the other hand, the record of the operations made in the interim is so brilliant, that it is small wonder that many have been seduced to strive for it. Sonnenberg reports 131 operations in the interim, with no deaths; and this report is duplicated by others again and again, so that we can look upon operation at this time as almost absolutely safe. Operations in the acute stage rarely are better than 90 per cent. recoveries. It is, therefore, the hope of giving the patient the best chance that the operation is postponed.

But what happens by this temporizing? Full statistics of medical treatment of appendicitis are not accessible. Chauval reports 84 cases treated by classic medical measures, with a mortality of 30 per cent.

The question, then, is this:—with a medical diagnostician of great acumen, and a surgeon of marked ability, there will be a mortality of 10 per cent. for urgent operations, (made as soon as possible) whereas with medical means alone, there will be a mortality of 20 per cent. or 30 per cent. With operation in the interim, or “cold stage”, there is practically no mortality.

The question can be further considered thus: Suppose we wait for the first signs of peritonitis or pus. In Chauval’s statistics this was the rule in 81 cases, with a mortality of 31 per cent.; this rule is, then, a dangerous one.

There are many cases of appendicitis that recover without surgical intervention. Can these be prognosticated, or is it a matter of luck? This question is hedged about by so many incidents, that it is impossible to answer. I do not believe that the symptoms have been so clearly defined that an absolute diagnosis is always possible. Neither do I believe that we know, in all cases, whether operation is imperative.

One question is well demonstrated; recurring appendicitis should always be operated. That much is fixed. No matter how mild the case, there should be no departure from this rule. I recall one case where the first three attacks were simple and short, and the fourth fatal. It is not certain that attacks subsequent to the first will be less severe, or that they will be more severe. They may be either, and to temporize is dangerous. There is but one mode of procedure, and that is operation.

After one well marked attack, with or without induration, there will always be difference of opinion. If there is any abdominal disturbance, operation should be advised. If there is persistence of pain, or occasional pain in the right side; if there is persistence of constipation, with colic; if there is induration, or tenderness in the vicinity of the caecum; then operation should be advised.

When perfect recovery follows a well defined attack, even then operation should be advised. This position is not so well established, but should, I believe, be taken. An appendix that has been the seat of severe inflammation may always be a danger. It may pass into a harmless state, but there is no means of knowing that. The operation for its removal is practically free from danger and should be advised.

We will now consider our attitude during the acute attack.

Of the fulminating cases there is no doubt. They should be operated at the earliest possible moment. Twelve hours' delay may be fatal. When a case begins with vomiting, and purging, pain and fever, the syndrome resembling that of cholera morbus, and the vomiting and purging cease, and tenderness and muscle reflex appear over the appendix, and the diagnosis is reasonably clear, operation is urgent. Many of these cases reveal a gangrenous appendix in twenty-four hours. I recall one striking case. A young man, in sound health, began, at noon, to have what appeared to be cholera morbus. I saw him in four hours. The next morning vomiting had ceased, but the fever was 103. Appendicitis was strongly suspected. Operation in the evening revealed a gangrenous appendix.

The moderately severe cases, where the diagnosis is certain, call for careful judgment. When the inflammation lingers, and signs of peritonitis or pus appear, surgical intervention is necessary. When these cases are watched by careful and intelligent observers, you may chance temporizing. It cannot, however, be denied that general peritonitis or abscess may steal in unnoticed, and the patient be in grave danger before you are aware of it. I well recall a case illustrating this. The patient had an acute abdominal attack that subsided in two days. The only persisting symptom was nausea. After six days the fever began to rise and in two days the patient died. Autopsy revealed appendicitis, with a large abscess in the posterior part of the pelvis. The case completely blinded me.

This case should suggest to us that dangerous and treacherous calm, that sometimes intervenes in appendicitis. Almost all the symptoms subside after an acute onset, the patient feels better, and the physician is relieved. If you have suspected appendicitis distrust the calm—it may be an ambush. If the tenderness persists in McBurney's point, and the muscular reflex continues, and there is some meteorism, and the pulse is rapid, and the patient disproportionately weak, the case calls for surgical intervention. There is nothing in the history of the disease more difficult to estimate, nothing that requires cooler judgment, than this treacherous period of calm. Examine *per vaginam* and *rectum*, and use the most strenuous vigilance in observation. We might say of these patients what Gosselin said of strangulated hernia cases: "That they must never be left until relieved by taxis or keleotomy."

They should be almost constantly under observation. It requires not a little courage to advise operation at such times. To the attendants in the sick-room the patient seems to have passed the crisis, and to be recovering; whereas he may be in serious danger, and should be operated at once. Not a few cases are lost through carelessness, or foolish hope under such circumstances.

Just here I will state, that a rapid pulse with low temperature is a more dangerous indication than a slow pulse and high temperature. In appendicitis the former indicates a toxic infection of the body, and serious depression of the nervous system. Operation is more dangerous at such times.. Moving a patient, too, is dangerous at such times. I will again ask your indulgence with an illustration apropos of this. A child had appendicitis, as it seemed to me, and had fallen into this depressed state. Operation was imperative and the patient fit at two o'clock in the afternoon. He was removed to a hospital, and the surgeon refused to operate because of the collapse. The moving was the cause of the increased depression. It is the possibility of this sudden and suspicious calming of the symptoms that leads me to ask for surgical intervention in moderately severe cases. I sometimes chance it and am safe. If you ask for surgical intervention, once out of ten times you lose the patient; if you wait, and advise the so-called interim operation, the patient is always saved. If you wait too long, get general peritonitis, the mortality rises in geometrical ratio. It is not surprising that Dieulafoy says that he never temporized with regrettable measures, never indulges in the hope that the appendicitis will become chronic; the damage is already done and must be met with operation.

The most favorable type of the moderately severe cases is the one associated with a well-marked induration, or cake. When this is well defined it indicates the high probability of a well protected, and walled off peritoneum, and justifies the hope that the infection will not become general or severe. An induration is often first detected through the rectum. Very often in such instances I do not advise surgical intervention. I expect such form of appendicitis to recover. If the induration becomes soft intervention is demanded at the earliest day. Usually it does not suppurate, but gradually absorbs away in a few weeks. If it does not disappear the patient is not safe. I recall an instance where the induration remained two years, and then a second attack developed which was fatal. Persistent induration always calls for surgical measures.

There is a third class of cases, classified as mild. They last from a few hours to a few days, and are attended with no urgent symptoms. Some of them are described as appendicular colic, and typhlo-appendicular colic. The question of diagnosis is of the highest importance at such times, and is attended with great difficulty. The question usually lies between appendicitis, and ileocolitis, though there are other possibilities. Appendicitis is almost invariably acute, with no intestinal antecedents. Ileocolitis has usually a history of some previous bowel disturbance. In the former there is pain in the iliac region, muscular reflex, tenderness over the appendix, and no mucous irritation of the intestine. In the latter there is no well defined tenderness or pain, no muscular reflex, and mucus is seen in the stools. This last symptom, though sometimes three or four days in appearing, is important, and is a valuable indication. The establishment of the diagnosis is very desirable, for the incident is of great interest in the patient's history, in view of possible subsequent attacks, and the possible diagnosis of the chronic form of the disease, which always calls for surgical intervention. In these cases of slight and transient inflammation, or appendicular colic, I do not advise surgical measures, unless they are recurrent, in which case I do suggest them.

Treatment: The classical treatment for appendicitis is ice to the right iliac region, rectal enemata for emptying the bowels, rest, restricted diet, opium for control of pain, and no purgatives. Beyond this there is nothing. Men of the radical school insist that there is no such thing as medical treatment; that nothing is of any avail; that to wait, is only to temporize. Dieulafoy says, that he never used medical treatment because there is none. It is, of course, impossible to say how much these medical measures do accomplish, but they certainly accomplish something in a negative, if not a positive, way. One might as well say that there is no treatment for pneumonia.

The question of when to decide on surgical intervention cannot be answered in a single formula. There are always some fatalities from operations in acute cases, and none in chronic cases. The effort should be to manage the disease so that it may reach a safe stage. This is the excuse for delaying operation. Delay is suicidal in 30 per cent. of the cases. Delay is safe in mild cases. It is the moderately severe cases that are doubtful. When the moderate case shows no induration, a rising leucocytosis, and severe paroxysms of pain, surgical intervention is necessary.

When the fever, pain and acute symptoms cease, and the patient becomes very quiet, with rapid pulse, nausea, moist skin, and hyper-leucocytosis persists, operation is necessary. When acute symptoms, and hyper-leucocytosis subside, and early signs of depression intervene operation is necessary. Hyper-leucocytosis is present in appendicular colic, and leucopenia has been observed in pus cases. Thus the blood count alone is not always a guide. When the resistance of the patient is low, or the morbid organism unusually virulent, the blood count may be low. As I have already indicated, it may be a valuable symptom, and is a factor that should be reckoned with.

I am not prepared to ask for surgical intervention in every instance: always in severely acute, and chronic cases; exceptionally in mild cases, or in appendicular colic; often in moderate cases, according to the behavior of the disease.

HERNIA FOLLOWING OPERATIONS FOR APPENDICITIS; CAUSES AND MEANS OF PREVENTION.

BY C. A. HAMANN, M. D.

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That hernia does follow in a certain proportion of cases after operations for appendicitis is well known to all. What kind of cases then, and what sort of operations are liable to have this as a sequel?

When an abscess is present and the necessity for drainage arises, the resulting cicatrix is often incapable of withstanding intra-abdominal pressure and a bulging of the intestine ensues. The only kind of cases in which I have seen hernia occur were those where it was necessary to pack the wound. After so-called "interval operations" hernia practically never occurs, granting that the operator has a reasonably good technique.

What has the length of the incision to do with it?

Of course, the longer the incision beyond certain limits, the greater danger there is of hernia following. There is not much difference, however, whether the incision is one inch or two inches long. On general principles, I am opposed to small incisions. If an abscess is present—if adhesions exist, if the appendix is not easily found, or is in one or other of the many anomalous positions that it may occupy, it is bad surgery to try to remove it through a small opening. To tear out an adherent appendix through a small

opening, when one cannot see what he is doing, is not good surgery. I lay the parts open freely in a difficult case; there is too much danger of tearing the bowel, of hemorrhage, of injury to the iliac vessels, or the bladder, of rupturing the appendix, of spreading the infection, etc., to justify one's trying to execute these manipulations through a one-inch or even an "inch and a half" incision. If the parts are properly sutured there is not much danger of a hernia. And if a hernia does occur—it is not serious—it produces little or no discomfort—and if need be can be remedied by an appropriate operation. Right here I may briefly discuss the desirability of wearing a bandage or abdominal supporter after operations, with a view to preventing hernia. I don't believe in their efficacy and consequently do not use them. After an operation that is done in the interval, when primary union has been secured, there is no need of them—they really weaken the belly-wall because the muscles are not called upon to contract so strongly, being aided to a certain extent by the bandage; consequently they undergo a partial atrophy from inaction. After an operation upon an acute case when the wound has to be packed, there is also no need of using a support after the wound has healed. Hernias do not appear at once after the patient gets up, but after months or years. Scar tissue contains no elastic fibres; elastic fibres when once destroyed are not regenerated. Scar tissue contracts for a certain length of time after its formation. It does not give way until this contraction ceases—after this there is danger of its stretching. Why then put on a bandage immediately after the wound has healed? That is not the time at which there is danger of a hernia. It would be more rational to employ a supporter after six months or so—if you are going to use one at all. I am perfectly well aware that many operators of wide experience make use of bandages, and believe they tend to prevent hernia. Sonnenburg of Berlin, the best German authority upon appendicitis, *is a believer in their efficacy.*

In making the incision through the abdominal wall it is best not to cut any of the lower intercostal nerves, or the ilio-hypogastric, for changes in the muscles supplied by these nerves will ensue—and these lead to a weakening of the parietes. We cut therefore parallel with the nerves, i. e., obliquely downward and forward.

In cases which are operated upon during the interval between attacks, it is best to make use of the method suggested by McBurney. As is well known, this consists in the division of the skin

and fascia; next separating the fibres of the aponeurosis of the external oblique, and then separating the muscular fibres of the internal oblique and transversalis without dividing them transversely. After cutting through the transversalis fascia and peritoneum, and removing the appendix, the parts are accurately sutured. It is important to bring into apposition the cut edges of the transversalis fascia as well as the peritoneum. The margins of the opening in the internal oblique and transversalis come into apposition without suturing provided no fibres have been transversely divided. It is well, however, to insert a couple of sutures, using the same thread that has been used in bringing together the peritoneum and transversalis fascia, so that no "dead space" may exist between these structures. Accurate coaptation of the aponeurosis of the external oblique and the superficial fascia and skin completes the procedure. When primary union occurs, it is practically impossible for a hernia to ensue after such an operation. The McBurney incision is, however, not appropriate in many cases in which an abscess exists, or when extensive adhesions are present, or other conditions necessitating prolonged and difficult manipulations are met with.

There is a symptom in connection with peritonitis which I have noticed in nearly all of these cases. I have never seen it referred to in text-books or mentioned by anybody else, and when it is present it has always proved an unfailing sign of general abdominal suppuration. It is an apparent vasomotor paralysis which brings about a cyanosis of the trunk, notably of the abdominal region. It is, of course, only one of the expressions of a condition of shock which follows perforation and a general abdominal infection. In my experience it is present in varying degrees in all cases. If in a given instance the patient is allowed to go to his death, it precedes the grand finale but a few hours. It deepens until it becomes general, and we have the general cyanosis of a rapidly deepening color, the leaky skin, the incoherence of faulty cerebration, and a speedy and merciful release from the suffering. In proportion as this cyanosis is pronounced or indistinct I have felt that I could express with reasonable assurance the probable malignancy of the infection.—*Chas. A. Wheaton, M. D., in N. Y. Medical Journal.*

Symposium on Nephritis.

PAPERS PRESENTED AT THE MEETINGS OF THE CUYAHOGA
COUNTY MEDICAL SOCIETY, IN CLEVELAND, BEGINNING
1ST NOVEMBER, 1900, AND CONTINUING ON THE
FIRST AND THIRD THURSDAYS OF THE
MONTH UNTIL FINISHED.

A SHORT MEMOIR OF DR. RICHARD BRIGHT.

BY H. E. HANDERSON, M. D.

There has been assigned to me to-night the congenial duty of introducing the proceedings of the evening by a brief memoir of the eminent English physician, whose best-known labors were bestowed upon the pathology of the disease which deservedly bears his name, and which forms the subject of discussion of the present meeting.

Richard Bright, the son of a banker and merchant of Bristol, England, was born in that city Sept. 28th, 1789, and matriculated in the Faculty of Arts of the University of Edinburgh in the year 1808. The following year, however, he transferred his allegiance to the medical department of that institution, where he enjoyed the instruction of those eminent teachers, Alex. Monro, *tertius*, Andrew Duncan and Charles Hope. In 1810, possessed apparently by a restless desire to see the world (a desire which seems too to have influenced his life for many later years), he joined Sir George Stuart Mackenzie and Mr. (afterward Sir Henry) Holland, a fellow student in Edinburgh, in a trip to Iceland, devoting special attention to the botany and zoology of that remote island. On his return Bright went to London and placed himself under the instruction of Dr. William Babington, attending also the surgical lectures of Sir Astley Cooper, the two Clines and Benjamin Travers. In 1812, however, we find him once more in Edinburgh, where he graduated in September of the same year, presenting for his medical degree a thesis entitled "*De Erysipelate Contagioso.*" Immediately thereafter, apparently with the design of securing the degree of Cambridge University, he matriculated in Peterhouse College, but, after a sojourn of only two terms, abandoned his original intention, returned to London and associated himself with the famous Dr. Thomas Bateman in the Public Dispensary. The years 1814 and 1815 Bright devoted to foreign travel and study, attending the lectures and clinical instruction of Ernst Horn and Hufeland in Berlin and of Joh. Valentin Hildenbrand and Joh.

Peter Frank in Vienna. On his return to London he was admitted a Licentiate of the College of Physicians in 1816 and appointed assistant physician to the Public Dispensary and to the Fever Hospital. In the latter position he contracted a severe fever, which nearly cost him his life, and was, doubtless, the cause of another continental tour which immediately followed. On his return to London, Bright, now thirty-one years of age, seems to have concluded that it was time to settle down to the real work of life, and in 1820 he opened an office in Bloomsbury Square, London. In the same year he was elected an assistant physician of Guy's Hospital, and, with indefatigable energy and zeal, began those clinical and pathological studies which have secured his fame for all time. For many years he is said to have spent six hours daily in the wards and post mortem room of the hospital, while he was also an active and punctual teacher in the medical school of that institution. In 1824 Bright was elected full physician to Guy's, dividing the lectures on medicine first with Dr. Cholmley, and subsequently with the brilliant and famous Dr. Thomas Addison. This service Bright maintained until 1843, when he resigned and was elected a consulting physician to the hospital. He was also elected a Fellow of the College of Physicians in 1832, was chosen Lumléian lecturer in 1837, was one of the Censors in 1836 and 1839, and a Member of the Council of the College in 1838 and 1843. On the accession of Queen Victoria in 1837, he was also appointed extraordinary physician to Her Majesty.

Dr. Bright, though apparently possessed of abundant means and enjoying the influence of powerful friends, does not seem to have been very successful in his early practice, though in later life he became one of the most esteemed consultants of London. Perhaps his early restlessness and peripatetic disposition contributed to foster a distrust of his ability, until the latter was demonstrated by the success attained by means of severe and long-continued labor. He was never a brilliant and popular teacher, in which respect he contrasted strongly with his eminent colleague, Dr. Thomas Addison, of supra-renal fame. Bright was rather a careful and thoughtful observer. Dr. Wilks says of him: "Bright could not theorize, and fortunately gave us no doctrines and no 'views.' But he could *see*, and we are struck with astonishment at his powers of observation."

Bright too was not the first to detect the association of albuminuria and dropsy. This had been noticed already by Dr. John Blackall of Exeter in 1813, and a few years later by Dr. William

Charles Wells, who was, by the way, a native of South Carolina. Indeed, Domenico Cotugn of Naples in 1770 had observed that dropsical patients might pass urine which coagulated upon the application of heat, and William Cruikshank (died 1800) of Edinburgh had even assumed the presence or absence of albumin in the urine as a guide for distinguishing the varieties of dropsy. Bright's volume entitled "Reports of Medical Cases, Selected with a View of Illustrating the Symptoms and Cure of Diseases by a Reference to Morbid Anatomy," published in 1827, however, first showed that certain changes in the kidney, described and depicted by him, were associated with albuminuria, and that this albuminuria might be accepted as the sign of such pathological changes in the kidney and the prognostic of dropsy, if the latter was not already present. A second volume of "Reports of Cases," published by Bright in 1831, was devoted to diseases of the brain and nervous system and displayed equally careful observation. Bright was also a contributor to the first volume of "Guy's Hospital Reports," published in 1836, and to various volumes of the "Medico-Chirurgical Transactions." In the latter journal he was one of the first to describe acute yellow atrophy of the liver, pigmentation of the brain in miasmatic melanæmia and the cardiac bruit of chorea.

Richard Bright died in London of a cardiac affection on December 16th, 1858, after a busy and useful life, which goes far to establish the truth of the maxim that "Geuius is only hard work."

PATHOLOGY.

BY R. G. SCHNEE, M. D.

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The post mortem appearances of the kidney in acute nephritis vary considerably. In the early stages there may be little alteration from the normal macroscopic examination. Usually, however, the kidney is congested and swollen, the capsule retracts when incised and strips easily. On section blood may drip from the cut surface, which is dark and striated, the striæ showing evidence of engorged areas composed of the convoluted tubules and malphigian tufts. When the condition is more advanced the cut surface is much lighter, has a mottled appearance, the pyramids standing out an intense red in color, the intervening portions

being grayish or yellowish. In some instances the glomeruli are very marked, being swollen and red, while in others this condition is not so noticeable.

When the glomeruli are attacked, as in scarlet fever, we call the condition glomerulo-nephritis. The capillaries of the malpighian tufts are found distended and the glomerulus filled with an albuminous exudate, red and white corpuscles and epithelial cells from the epithelium lining the capsule. Sometimes hyaline thrombi are formed in some of the capillaries, or the capillary wall itself becomes swollen and so tends to narrow its lumen. The glomerular vessels may show pathologic changes in their walls. In hyperemic conditions they are distended with blood, some containing a large proportion of leucocytes and others a number of fatty cells, probably degenerated leucocytes. The capillary endothelium may proliferate and thus obstruct the channels of these vessels.

In acute catarrhal or desquamative nephritis the portion most frequently affected is the secreting epithelium of the convoluted tubules, though changes in the straight or in the collecting tubules may at times be seen. Cloudy swelling, fatty degeneration and hydropic infiltration are the changes most frequently seen. In cloudy swelling the protoplasm of the cell becomes swollen and granular. Fatty degeneration is shown by the appearance of fat globules in the protoplasm and hydropic infiltration by the sodden and swollen appearance in the cells often accompanied by vacuolization. Desquamation usually takes place and the tubules may lose more or less of their epithelial lining. Very often the epithelial cells undergo proliferation as if an attempt were being made to replace those lost. Cases of great severity may be marked by necrosis of the epithelial cells from the first. In this variety of nephritis the tubules may contain numbers of casts of various kinds. Epithelial casts made up of desquamated and degenerated epithelium agglutinated by coagulated albuminous matter, hyaline and granular casts composed of albumen and disintegrated cells and also red corpuscles and their detritus after hemorrhages in the form of brown pigmented granular casts.

In mild cases interstitial tissues and vessels are but little affected, but when the condition is grave, these intertubular structures are usually somewhat altered. Sometimes the capillaries only are affected by these changes, but often inflammatory exudation takes place. When the kidney is swollen and soft, edema of

the connective tissue is present and is associated with an irregular hyperemia. In such cases the tubules are separated by broad septa infiltrated with liquid, fibrin, and in some places with leucocytes. In later stages the hyperemia may disappear and fat droplets make their appearance. This condition may be termed diffuse exudative nephritis and is usually found in cases due to septic infection.

Ordinarily, however, the changes in the vascular stroma take the character of circumscribed cellular infiltrations of the tissues between the tubules and surrounding the glomeruli. Around the stellate and interlobular veins the infiltration is usually quite marked. These areas are most numerous in the outer zone of the cortex and in the boundary zone between the cortex and medulla. The glomeruli of the regions of inflammation are surrounded by infiltrated cells. The tubular epithelium may be normal even in an inflamed area, or it may be a little cloudy, the nuclei of the cells still retaining their staining properties. In more serious cases the epithelium undergoes cloudy swelling with a tendency to necrosis, especially in the convoluted tubules.

ETIOLOGY.

BY A. W. LUEKE, M. D.

Acute nephritis is said to be more prevalent along the coasts of different countries than farther inland. As far as occupation is concerned, we find it more often amongst the classes who come into contact with water in their labors, as washwomen. The percentage of nephritides in the male sex preponderates above those in the females, probably due to greater exposure of the males.

The anatomical changes which are familiar to us as acute nephritis may be caused by a number of different agents which are harmful to the parenchyma of the kidney. Their injurious effects are transmitted by the way of the general circulation to the epithelium of the kidney. The damage to the renal epithelium is proportional to the quantity and concentration of the agent, and the time it acts upon the organ.

We may divide the etiological factors of acute nephritis into the following categories: First, those caused by acute infectious diseases or the toxins, which are the product of the micro-organisms of the malady; second, toxic drugs or chemicals; third, that class which seems to have no other predisposing cause than a cold or exposure; fourth, nephritis of pregnancy.

Under the first class, the nephritis following scarlatina is probably the most familiar to us, being known as nephritis scarlatina. Measles and German measles are seldom followed by an inflammation of the kidney, while in small pox and varicella it is of rare occurrence. In typhoid we generally find albuminuria, but seldom a true nephritis, although a severe form, known as renal typhoid sometimes complicates this disease. Diphtheria is quite frequently accompanied by renal inflammation, but more often of a mild type. Some of the severest forms which we meet are the septic nephritides, the sequelæ of sepsis, acute verrucose and ulcerative endocarditis, puerperal fever and pyæmia.

Then we have still to mention the disturbances of the kidney following croupous pneumonia, meningitis, erysipelas, angina, rheumatism, tetanus, and gastro-intestinal disturbances. To this class those forms of nephritis belong, accompanying various pustular skin diseases, from which toxins are absorbed. Under chronic infectious diseases tuberculosis is most often followed by an acute nephritis, syphilis should be mentioned here, but care has to be taken to exclude mercury and toxins from the pustular eruptions, as etiological factors in the diagnosis. Chronic nephritis is more often a sequela to malaria than acute nephritis is.

It is the function of the kidney to excrete a large percentage of the poisonous products of the bacteria. In this process the renal epithelium is often injured by the toxins, and if their action is continued for a long time or the toxins are very concentrated, the parenchyma of the kidney will show more or less degeneration, which may eventually be followed by acute, sub-acute or chronic parenchymatous nephritis. The primary origin of these nephritides are the micro-organisms which produce the infectious disease. In a number of cases pathologists have been rewarded with success in their searches for the bacteria in the kidney and urine, but this is not proof that the bacteria are the specific organisms of nephritis. On the other hand the propounders of the bacterial origin of the disease say that the bacteria could migrate through the glomeruli and be washed away after they had started an inflammation, their absence at the post mortem not necessarily refutes the theory of the direct origin of the disease.

At the present time we have not as yet enough evidence whether acute nephritis can be caused directly by the parasites in the kidney. Specific microbes have been found in a number of infectious diseases, as the diplococcus of pneumonia, typhoid bacillus and spirillum of recurrens.

Pernice and Scagliosi, two Italian experimenters, have injected anthrax and pyocyaneus bacilli and staphylococci pyogenes aureus, which resulted in greater inflammation than injections of their toxines. Senator found that injections of diphtheria toxines caused the same changes as the bacilli, but was unsuccessful in his efforts to find the diphtheria bacilli in the kidney.

In the next group we have a large class of drugs, chemicals and toxic agents which cause an acute nephritis. First we have those drugs and chemicals which enter the general circulation by the alimentary tract, and are secreted by the kidney. The most common of these are nitric, sulphuric, hydrochloric, oxalic and phosphoric acid, potassium dichromate and bichloride of mercury. It is questionable whether lead would give rise to an acute nephritis, more often to the primary interstitial variety. Cantharides, turpentine, balsam copaiba, sodium salicylate, chlorate of potash, etc., in overdoses often produce an acute nephritis. Albuminuria may occur after taking spicy foods and large quantities of alcohol. Many a nephritis has its origin in administering drugs by the way of the skin, as Spanish fly blisters, tar preparations, naphthol, pyrogallol, mercury and others. Carbolic acid and iodoform applied to open wounds can set up a renal irritation. Still another factor in this class are those toxic secretions which in abnormal conditions are excreted by the way of the kidney instead of the regular channels as the bile and bile acids in hepatic diseases, acetonurea in diabetes, and in burns of large areas.

Class III. The older physicians gave "cold" the first place under the causes of nephritis, but by pathological and clinical research only a small percentage now have their origin from this source.

It seems strange that a chilling of the skin should cause an inflammation of the kidney, but it has been seen by eminent men, who could find no other reason. At first it was explained that the blood would be stored up with excretions of the skin, then these would act upon the kidney. Others that by reflex action the vasomotor constrictors or dilators of the kidneys were paralyzed, but these explanations do not seem plausible.

Semnola, forty-five years ago, said Bright's disease was caused by chilling the blood, and in this way an albumin separated from the blood, filtering through the kidney, and if it continue for a long period the result would be a form of nephritis. This theory has still some exponents, but injections of blood, urine and

transudates of people afflicted with Bright's disease failed to produce a nephritis.

Another explanation was that the red blood corpuscle was destroyed by cold, as in periodical hæmoglobinurea, by placing the hands or feet in cold water, as was demonstrated by Rosenbach and Chvostek. But we are still at a loss to account for these changes in the kidney due to cold.

The etiology of the fourth class would require too much space here and will be mentioned under the nephritis of pregnancy.

The symposium will be continued in subsequent issues; it includes the conclusion on acute nephritis, and also chronic nephritis (exudative and non-exudative) and the special subjects.

STERILITY.

BY LILLIAN G. TOWSLEE, M. D.

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There has been so much written upon this subject that it seems almost useless to try to give anything new. But I wish to present a few suggestions with report of cases. A gynecologist has one set of patients that would give almost anything for children, and other patients either prevent conception or have babies faster than they can be cared for.

Among the causes of sterility are flexions, displacements, metritis, sub- and super-involution, mal-formation and arrested development, syphilis and gonorrhœa, diseases of tubes and ovaries, diseases of cervix and endometrium, fibroids, vaginal catarrh and hyperacidity of secretions, vaginismus, or stenosis of any part of the sexual tract. Physiological sterility exists before puberty, after the menopause, and in most women during the early months of lactation. It is stated that one marriage in six or eight is childless. The husband blames the wife and it is usually considered the woman's fault if sterility exists. But the cause of sterility should be looked for in both parties concerned and the husband should be made to assume his share of the responsibility. Modern investigation has shown that the husband is at fault in about one case out of every six. The chief cause of sterility in the male is latent gonorrhœa. If the husband who sends his wife to the doctor would also consult a competent physician, more cases of sterility would be relieved. Statistics show

that three-fourths of women conceive within the first year of married life, and many of the others conceive later. Sterile women who desire to become mothers should consult a physician in the first years of married life when pregnancy is more liable to follow proper treatment.

It is not always easy to ascertain the cause of sterility in the female. There may be more than one cause of sterility in the same person and the most apparent may not be the most important. Thus a stenosis of the cervix might seem to be the cause while an old inflammatory trouble in the appendages is the real obstacle. It is impossible to know positively whether the tubes are patulous, and a stenosis of the appendages is more difficult to overcome than of the cervix. Tubal disease is undoubtedly the most frequent cause of sterility, and the usual cause of tubal trouble is gonorrhœa. After pelvic peritonitis the tubes and ovaries are often adherent. The fimbriated extremity of the tube may become agglutinated, absolutely closing the distal end of the tube, or a stenosis may occur in any portion of the tube. If this condition results in both tubes it is impossible for the liberated ovum to reach the uterus, and pregnancy is absolutely negatived.

Women with chronic inflammatory disease, who have been sterile for years, after the removal of nearly all the appendages may become pregnant. A part of a tube and ovary is all that is needed, and they may be on opposite sides. Remarkable cases are on record of women becoming pregnant after supposed complete removal of the ovaries. Gynecological surgeons are trying of late years to at least save part of an ovary and tube, not only to preserve menstruation and avoid nervous symptoms, but with the hope that pregnancy may result. Many a partly healthy ovary has needlessly been sacrificed.

Frequently women who never have been pregnant, or sterile, for years, conceive at the menopause. Twenty or thirty years may elapse between pregnancies. Pregnancy may apparently occur even after the menopause. I have in mind a case where a woman ceased menstruating at fifty. At the age of 53 she gave birth to a child and never menstruated after that date. Pregnancy may complicate a fibroid tumor at the menopause in a woman who has previously been sterile. I remember one instance where removal of a fibroid tumor revealed the presence of a fetus. But fibroids and other tumors may prevent conception. The reason why fibroids so frequently hinder pregnancy is not only due to interference with the normal nutrition of the uterus and

lining membrane, but when excessive flow is present it prevents the ovum from gaining a firm attachment. Where the fibroid is sub-mucous or polypus it may cause contractions of the uterus, which would prevent the ovum from gaining a lodgment. Have often been consulted by women for sterility and found a large fibroid, while in other cases the fibroids were small and multiple.

Retro-displacement is mentioned as a cause of sterility, but women become pregnant with all manner of displacements. I have repeatedly seen exaggerated cases of retroverted and retroflexed uteri become pregnant. I have ceased to believe that a dislocated uterus can debar conception. Sterility is the hardest to overcome in some fat, healthy woman. It is often impossible to do anything for these who are so anxious to have children. In other cases it is surprising how often a few treatments will relieve any slight irritation present and pregnancy result even when treatments are not sought for that purpose.

Incompatibility may be a cause of sterility. The difference in temperament may be so pronounced that marriage is almost criminal. A little common sense would prevent many of these unhappy marriages. People rush blindly into marriage, and then realize that they are not and cannot be congenial. But this antagonism may also be caused by abuse or neglect. That sterility is caused by incompatibility in such cases is shown by the fact that a man and woman may live together childless for years, and after a divorce both re-marry and have children. The old illustration of Josephine and Napoleon is often quoted.

Mrs. K. consulted me in 1898 for sterility. Vaginismus was found on examination and advised removal of hymen. This I did and packed vagina with gauze. Two months after leaving the hospital she became pregnant. Many cases of sterility are due either to vaginismus or a nervous state which simulates vaginismus or a pseudo-vaginismus which can be treated by gradual dilatation of the vaginal outlet.

Mrs. B., housewife, age 23, married three years, consulted me in 1889 for sterility. Her menses first appeared at the age of 13, always regular, duration 3 to 4 days, flow scant. She was very anxious for a child. Her health being first class she could not see why she did not become pregnant. On examination found an infantile uterus, depth $1\frac{3}{4}$ inches. Advised use of faradic current, but did not hold out any great hope that by the use of the battery the womb could be stimulated to meet the demand of a normal uterus. Intrauterine electrical treatments were kept up

faithfully for several months twice a week except just before and after periods. The uterus developed gradually and when I dismissed her the uterus measured $2\frac{1}{2}$ inches. Three months later she informed me she was pregnant. I delivered her at term of a nine-pound girl, labor normal. This case occurred early in my practice and was an exceedingly interesting one to me, as I had an opportunity to give electricity a thorough trial and follow the case to a successful termination.

Mrs. P., age 31, consulted me for sterility and painful coitus in 1896. Her last menstrual period took place six years before, at the age of 25, she having passed through the symptoms and stages of menopause at that time. On examination found vaginismus. Advised cutting out hymen, which was done. While under anesthesia found an atrophied uterus and vaginal vault shortened. Posterior fornix filled with chords similar to a woman 50 or 60 years of age. Her doctor in southern Ohio had advised using electricity to renew the menses and as he was going away for a year directed her to me. This I absolutely refused to do as the change of life had taken place normally, except as to her age. After the operation I dismissed her. In due time her physician returned and used the faradic current. She began to menstruate, and conceived and bore twins. This shows that electricity may stimulate the uterus and appendages to renewed activity even in apparently hopeless cases. The last word on electricity in gynecology is yet to be written.

Mrs. E., age 26, married three years, consulted me June, 1899. Pain at periods severe with constant pain in back and groins, especially in the left side. On examination, found a retroversion, third degree, cervix eroded, tender over fundus, uterus immovable, with an enlarged and sensitive left appendage. Told her that I believed with treatment most of the symptoms could be removed and perhaps permanent cure effected. She then informed me she had been under the care of a prominent gynecologist here and was advised to have her ovaries removed; in fact, had fled from the hospital after going there for that purpose. I acknowledged that the authority was one of the best, but would not recall the prognosis just given. The exudate and tenderness rapidly disappeared under hot douches and boro-glyceride tampons, and the uterus became freely movable, though still retroverted. After treating her a few months, she became pregnant, which was the joy of her life. During the first three months of pregnancy feared a miscarriage, but the months passed and she

was delivered of a nine-pound healthy boy. Six weeks after delivery, on examination found uterus and appendages in normal position. This shows what can be accomplished by patience and perseverance in minor gynecology and that some apparently serious conditions can be removed without operation. It is well to at least give the woman the benefit of the doubt and try a thorough course of treatment before resorting to the knife.

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MEDICAL SCIENCE AT THE CLOSE OF THE NINETEENTH CENTURY.*

BY J. F. PURVIANCE, M. D., STEUBENVILLE, O.

Gentlemen of the Medical Tribunal:

Custom makes it obligatory with me at this hour, as the president-elect, to offer you an address before entering upon the other duties of this office.

In doing this, it would reveal an imperfect appreciation of regard and a spirit of ingratitude were I to make no thankful reference to the honor thus conferred by your vote. While I therefore say, thank you, I desire also to congratulate you, not over your choice of a president, but over the privilege we embrace of enjoying the pleasures of this fraternal meeting, and realizing the benefits of an interchange of thought concerning truths of a great calling.

Did I say great calling? That is not justice to the healing art that embraces the practice of true medical science. He that is the greatest aid in times of the greatest need is certainly the greatest of all benefactors. It is the physician alone that habitually enters the home of the afflicted where the flow of blood promises a speedy death, or where the sights of convulsive struggles have prostrated attending friends with despair, or where by accident or disease the lips are sealed with unconsciousness, and then by the equipment of science he can command a halt to approaching death.

It is through the untiring zeal of the physician that sanitary provisions are accessible by which epidemics are stopped in their advance to happy homes and prosperous cities. He whose care is bestowed on humanity from the first inspiration of breath until the closing scenes of life, is the physician; and so sacred are his services to humanity, and so closely are his duties related to the labors of the World's Saviour, in the relief of human suffering,

*President's Address delivered to the Medical Tribunal, Alliance, O., Oct. 18, 1900.

that no apology is offered for the claim that he serves in the greatest calling of temporal life.

This period in the world's history as well as that of medicine is such as to forcibly suggest a theme that elicits our attention from its appropriateness alone, if it even embraced no other elements of interest. The evening of the century in which we have thus far lived is with us. The great luminary of day will soon have risen and set its last in the nineteenth century, and another 100 years will be added to the unknown duration of the past.

As we assume a farewell attitude to this period we naturally indulge in thoughts of the past and recall the changes incidental to timely things.

Generations have lived and died, leaving to their successors the benefits of their experience and the fruits of such labor as contributed to scientific progress. In the various departments of human activity, changes have very commonly revolutionized the customs of previous years.

Inventions have added to the conveniences of life until now we would discredit the possibility of ever being reconciled to the customs prevailing in the earlier years of this century. So great have been the contributions to the welfare of humanity as to make the nineteenth century one of superlative importance and create for it a conspicuous place in the history of the world. Progress in the development of science and art has been phenomenal, and achievements have multiplied as never before.

As we retrospect these triumphs of the recent past, while one element of success vied with another for supremacy, we can rejoice in the knowledge that medical science is to-day conspicuous in the great contest for superior merits. For a long period its feeble existence and slow development were strongly suggestive that from some inherent or acquired obstacle it would never become vigorous, but it has at last reacted, and from an emaciated child it appears, not in the age of maturity, but as a healthy adolescent, worthy the name of Medical Science. Throughout its life it has ever elicited an enviable respect for its beneficent characteristics, but as it grows in years and widens the area of its usefulness in the mitigation of sufferings and the preservation of life, by the prevention and cure of disease, it becomes more and more an object of universal interest. It was not until near the middle of the closing century that any successful provision existed to control the pain from operations in surgery. The mournful expressions of patients were common as they were held by ropes and

manual force to the table during amputations and other operations. But this period was followed by the blessings of anesthesia, that ended all pain and quieted every fear. By the aid of this beneficent gift the opportunities for surgical achievements have so widened as to secure the accomplishment of more than had ever before been classed with possibilities. Surgery being thus stimulated has continued in a successful search for still greater work, until today we hesitate to describe limits to its prospective area. In paying this flattering tribute to surgery, we may interpose the thought that due conservatism is often a needful virtue. Just as the most perfect work of excellent machinery is only secured by limiting its action to that for which it is properly adapted, so a due precaution in confining the domain of surgery to its legitimate province will contribute more to its healthy growth and due merits than would a reckless extravagance in its claims. A practical application of this thought may at present be made in the treatment of ovarian and vermiform appendicular diseases. While they are strictly surgical in many cases, we should not be forgetful that their proper treatment is not always so. No invitation for operative surgery to enter the home of the afflicted should be considered authentic unless endorsed by an existing necessity. This does not mean unwarranted interference, nor does it mean a neglect to do at the proper time what should be done.

As we proceed in the study of medical progress during its recent history, it is a fact worthy of notice that its period of most rapid advancement dates from the existence of a better knowledge of the specific causes of many diseases.

The characteristic symptoms in the various ailments of man have for a longer period been faithfully recorded. Diagnosis, classification and the nomenclature of disease have latterly changed but little. Close observation and care have long since developed these departments of medical science into a fair degree of correctness. This, however, cannot be said of etiology. After a long and diligent search for material that would add to the practical worth of this science it remained in obscurity as a thing of uncertainty while theories had their rise and fall, until at a late period the microscope revealed the identity of pathogenic factors previously unknown.

With this improved conception of the true cause of disease, we could the better comprehend its pathology, and thus we had an index to scientific treatment that was never enjoyed in its present fullness by previous generations.

By virtue of this aid we are enabled to realize specific results from the treatment of abnormal deviations most common in medical and surgical practice. By its aid we can abort the development of epidemics that threaten the lives of community. We can say stop to the continued fevers with which we once were so patient in allowing to "run their course" until the subject was left a living or dead skeleton as a reward for the prolonged and anxious care of sympathizing friends. By the same aid we have learned to not wait for the development of laudible pus—once so proverbial as a prerequisite to the healthy granulation of wounds. But instead of this antiquated custom we have ceased to regard the pyogenic microbe as a useful friend in surgery, and by its exclusion or speedy extermination we secure union by first intention. The profession is too familiar with the changes thus produced in our recognition of disease to make a further reference needful at this time. The advance in etiology has not only given us a more perfect understanding of the nature of disease, but this knowledge has called for new remedies to meet newly recognized indications, and from this call many therapeutic agents have been generously added to the former list.

A knowledge of pathogenic bacteria at once called for something to antagonize their living existence. This want had scarcely been recognized in its fullness by the profession until antiseptics were so freely offered as soon to make the work itself the most conspicuous in medical literature.

Emerging from a period not yet forgotten by the older members of the profession, when charcoal and yeast were the principal agents for the relief of local necrotic conditions, we are now prompted to exclaim how great the change that has resulted in the use of so many antiseptic agents for so many purposes. As a prophylactic they are used in dwellings, hospitals, yards, streets and sewers, to stay the development of disease.

For its cure, they are swallowed, inhaled, applied and injected, until every probable resort for bacteria is reached. We are truly living in an age when the most fashionable, as well as the most successful physician is he who best protects his patients from the destructive invasion of bacterial foes, by a vigilant guard and an untiring effort in their extermination.

But there is still another contribution to medical resources resulting from our advanced understanding of etiologic science.

It has become a well recognized fact that the most serious results from bacterial invasion are from the presence of toxines

that are thereby generated. The antiseptic remedies so destructive to the bacilla are not a remedy for their poison that so rapidly reveals its presence by threatening symptoms. For this purpose another want was recognized; another call for aid existed, and another response has been made so far as to enable us to check the devastations of a disease whose previous fatal visitations made it the terror of every loving parent. The value of antitoxine for diphtheria, as thus far demonstrated, identifies it as one of the greatest and final gifts of the closing century. The antidotal power of other serum preparations over the toxins of various zymotic diseases is gradually being demonstrated, and as we enter upon the new century we have reason to confidently expect a great reward for labor directed to this purpose.

Not only have the antitoxines proven their value in the cure of diseases, but certain products of a corresponding nature are equal in importance by establishing an immunity to the worst forms of epidemic disease. For a hundred years vaccine virus has been favorably known as a preventive of smallpox. As Jenner demonstrated its value in 1798, so in 1898 Haffkine succeeded with his prophylactic from the bacillus pestis in controlling the ravages of the plague in Hubli. With a weekly average of 11,532 unprotected inhabitants, this city lost within four weeks 1,497 from this disease. During the same period the fatality with an average weekly population of 29,353 that were protected by inoculation in the same city, there was only a loss of 165. The difference between 165 out of 29,000, and 1,500 out of 11,000, is the testimony favoring inoculation. No comment is here needful to further emphasize the importance of this victory of science over a disease that has proven itself the greatest existing foe to human life. In 1771, from April to December, it carried 80,000 souls into eternity out of 150,000 inhabitants of Moscow.

During five weeks in 1834 within the 130,000 inhabitants of Smyrna there were 5,721 cases, of whom 4,831 were fatal. If a like epidemic should enter the sacred precincts of our own native land, the army of defence must be called from the medical profession; and by aid of the science with which we are proud to be identified we can stand as a guard to the safety of the millions of our citizens.

We know not how far serum therapy may yet successfully apply in the prevention and cure of disease, but past observations encourage the expectation of this step being one in the direction of the greatest triumphs of medical science.

We may notice further that the progress of medical science has not only been favored by accessions to its resources, but also by a process of elimination of such as would encumber its rapid development. The line of its march during the closing century is strewn with the vestiges of effete theories and agencies relegated to a destined oblivion. Some of these have served a limited usefulness when nothing better was available, but no claims of a previous adoption have ever secured a continued attachment longer than when something better was offered. For many years an importance was attached to venesection that made the lancet a leading implement in the treatment of many ills. So commonly was it used by the profession that the laity conceived of its necessity as a household remedy for colds, headache, pain in the side, fever, rheumatism, thick blood in the spring time, etc. Its repute was such as to promise for it a place with generations to come; but alas! it has been superseded and the little instrument lies rusting from disuse.

My custom is doubtless not greatly different from that of most physicians in the fact that for 15 years the blade of my instrument has not been moistened in the act of drawing blood; and yet when I recall the scenes of that memorable period when it was last used, I have only words of praise for its value.

It was when the features of my wife were distorted in the convulsive struggles of eclampsia, and I stood as a Casabianca when the hopes of all around had fled, and at the click of that lance an arched stream of blood poured from the trembling arm—following which her struggles ceased and in time she again enjoyed the blessings of health.

As I think of the lancet and its history I feel that a fit epitaph would be, "Laid aside in disrepute from misuse; but when the pendulum of professional sentiment shall swing only within the precincts described by a more deliberate judgment, it will be raised from its resting place and enter a future state of usefulness."

Even at the risk of taxing your patience, duty here demands a reference to the science of pharmacy by way of acknowledging its present worth to the physician. Until a recent period its offerings have been so reserved as to create an apparent indifference to the convenience of both physicians and patients. For many successive years the crude condition and uninviting appearance of drugs commonly used as medicines were such as to dispute all claims to good taste, and seriously compromise a confidence in our aspirations to delicacy in our dispensations. Rhubarb was com-

monly obtained in root—corresponding in shape to a longitudinal bi-section of an egg. Colombo root, in its cross sections typified the wheels of an ancient toy cart. Sarsaparilla in bundles of long, slender roots, folded as a modern bunch of shoe strings. Cinnamon bark rounded in quills that were bundled in the style of macaroni. Aloes were in cans moulded in a mass too hard to cut and too soft to break. Opium was found in a sticky mass rolled in balls covered with debris of the poppy. Ammonia mur. was furnished in chunks of indefinite size that would neither split, chop nor break with any ordinary effort of the physician. Assafoetida with its characteristic aroma was found in pieces of varied shapes, sizes and qualities from which the physician could select and prepare at times when desiring an hour of questionable pleasant recreation.

Such is a truthful reference to a few of the articles that constituted the former physician's supplies. It was then the custom with the student of medicine to spend a lengthy period with a preceptor, and the opportunity of using a large mortar for the preparation of these and other like articles of medicine was among his first lessons, and as a substitute for modern gymnastics he could continue in this recreation indefinitely. It was truly a practical series of lessons in the line of pharmacy demonstrated. In this department he became so familiar with the smell of capsicum, assofoetida, carbonate of ammonia, valerianate of zinc and such like remedies as to leave a lasting impression during his after life. The tedious process of pill making, and the mixing of powders for future use, are all within the recollection of the older practitioners. The fluid extracts, alkaloids, granules, coated pills and tablet triturates have not always extended their convenience to the physician as at present. They are among the recent gifts of the closing century, and are prominent in the list of all that adds to the advancement of medical science.

As we thus review the various departments of the healing art, and make but an imperfect comparison of their present importance with that of the past, we are impressed with their general and rapid advancement. It is with a spirit of admiration that we contemplate the facilities and capabilities of the present, although we are equally conscious that the limit to progress is not yet reached. There are yet unknown treasures in the future to be enjoyed in the precincts of medical science as it continues to deal out its merciful gifts to frail humanity. We are not, however, to mourn over our failure to scan the monumental summit of prospective medi-

cal science,—nor grow despondent in futile efforts now to accomplish what may yet be done. Rather should we look back over the rugged paths we have passed, and rejoice that today we are higher in this mountain of science than it has ever before been the privilege of man to enjoy. As physicians stepping from the 19th to the 20th century we should pride in the worth of the profession to which we belong, and as it passes to future generations we are gratified to know that in our history we have emphasized the desire that its merits may ever multiply and its present embellishments never tarnish. As the future becomes heir to the possessions of the past, it may forget our names, but it can never afford to forget the fruits of our labors. As a charitable ancestor we bequeath to it all we have in scientific knowledge, and to this we add an example of industrious inquiry worthy the emulation of all followers. With this inheritance as an aid to advancement, no eye can measure the extent to which medical science may ascend. Its contest with disease may yet restore the primitive duration of human life, and limit the visitations of death to its true purpose as a relief from such infirmities of age and accident as make it a misery to live and a blessing to die.

At such a period small caskets and little graves will be seldom found. The uncertainties of life will be largely banished by the majestic approach of what we may anticipate of medical science. Mountebanks will then be ostracised forever, and the unwarranted claims for patent combinations of drugs will no longer pollute the pages of respectable periodicals. Sects and isms in medicine will no longer exist as morbid excrescences to mar the slightly appearance of this great and noble calling. Speculative theories will have vanished in the presence of scientific truth, of which every physician shall be a votary. Welcome, then, new century, and as your lengthy years yield their treasures, we cherish the hope of brighter days and greater victories over all conditions that disturb the perfection of health or shorten the duration of life.

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Editorial.

ORGANIZATION FOR MEDICAL DEFENCE.

In the May, 1900, issue of the GAZETTE we took the opportunity to direct our readers' attention to the necessity for organization among the physicians for defence against suits for malpractice which, as there stated, "Are altogether too prevalent."

In the same article was given a synopsis of a report submitted by a committee, appointed for the purpose, to the Montreal Medico-Chirurgical Society as a basis for the formation of a Dominion Medical Defence Association. Since that time there has been

activity in our own country—in Minnesota—looking toward the formation of a similar association or union, and, we are pleased to note, the activity seems likely to result in success. The object of the union is to defend its members in suits of alleged malpractice. Its membership is to be confined to the State and is, of course, limited to physicians of good repute, membership in a medical society being a possible prerequisite. The union will not undertake the defence of genuine malpractice, but only those cases which are justly defensible, many of which are instituted as blackmailing schemes. The suitability of a case for defence is to be decided by a council; but should that body give an unfavorable decision the defendant may appeal to a committee of arbitration to be composed of three members, one chosen by the union, one by the defendant and one by the members already chosen; and the decision of this committee is to be final. If the case be found properly defensible the union will undertake all the expenses of the suit, and the defendant must agree to be guided in the defence by the union.

Should an adverse verdict be rendered the union does not undertake to pay the claim allowed, as it is contended that this would encourage the bringing of suits and the greater probability of them being taken up by those lawyers who seek such cases as speculation; also it would possibly influence a jury to find a verdict for the plaintiff. The union will spare no expense in fighting the case, and should a verdict for the plaintiff be given at the first trial, the case will be appealed to a higher court. With regard to fees the plan is for each member to pay an initiation fee of five dollars (\$5.00) and to pledge himself to pay ten dollars (\$10.00) more when called upon to do so by the directors, though it is not expected that such an assessment will be necessary. The system of fees recommended by the committee to the Montreal Medico-Chirurgical Society is somewhat different and may be thought to have its advantages. The system recommended is as follows:

“That the conditions of membership shall be the payment of an entrance fee of \$5.00, and no subsequent annual fee, save it be found at any time that the amount obtained from these entrance fees is insufficient to cover the cost of defending cases in any given year; that then the membership be assessed throughout the Dominion, the sum not to exceed two dollars (\$2.00) per annum. That failure to respond to this assessment within one month shall, *ipso facto*, remove said practitioner from membership and from

benefits of such association, and for renewal of such membership the consent of the central council alone shall be effectual, and payment of entrance fee with assessment in arrears shall be required."

In London a Medical Defence Union has been in existence for several years. The solicitor for the organization reports that every case tried during the year 1899 was won by the union. That the union has a deterrent effect is shown by the fact that many cases are allowed to drop when the union signifies its intention to contest them. The existence of such a union, with the deterrent effects as here cited, must doubtless cause many would-be claimants to reflect before instituting an action and to appreciate that none but a just cause would win; and it must also act as a check to those lawyers who, zealous (?) for the cause of the wronged, are always ready to advise suit. "The deterrent effect must also extend itself more or less to the sort of doctor that allows himself to become a witness for the prosecution in such cases."

Such a defence union against malpractice suits among physicians appears to us necessary, for no one can doubt that the evil is increasing in frequency, until it would now seem that the first thought of many a dissatisfied patient is a suit for damages.

EDWARD LAUDER.

THE AMBULANCE SYSTEM.

Cleveland as a great medical center is rapidly coming to the front, and with its modern hospitals and well equipped medical schools, many of the musty practices and time-worn customs of the past should be relegated to oblivion. The best in everything pertaining to medicine and surgery is none too good, and we in Cleveland should not rest content with usages which would prove unacceptable in New York, Boston, Philadelphia, or other recognized medical strongholds.

We regret that our city is indebted to the undertakers of the community for the maintenance of its ambulance system.

If it were not for these public spirited gentlemen our wounded and sick would be left to the mercy of patrol wagons, street cars, delivery wagons, wheelbarrows, or other available vehicles, for transportation to their homes, or the hospitals. It is not creditable to the city, that its ambulance system exists as an institution for personal profit. As long as the present competitive system

is in vogue it can not be free from abuse. It is not, however, our purpose to discuss this side of the question.

There should be an effective and up-to-date ambulance system connected with every large hospital in the city—maintained in part by the hospital and in part by the municipality—the latter to have the privilege of transporting its public charges in return for its share of the expense.

No ambulance should be permitted to respond to a summons without the attendance of an *ambulance surgeon*. This officer should be clothed with the authority of the city, and the police present at any accident, should be subject to his orders.

It is inhuman, to say the least, to subject the victims of an accident, to the mercy or intelligence of an ambulance attendant.

The prompt and intelligent action of a surgeon will always add greatly to the safety and comfort of the patient, and is frequently the means of saving a life that would be sacrificed if left to the judgment of a driver until arrival at the hospital.

The young hospital physicians, usually bright and capable men, give their time to the institution for an experience of a year or two within its walls. No more valuable experience can be had than is to be found upon the ambulance.

It cultivates decision, action, judgment, tact and confidence, and is a position which every hospital intern would profit by.

We trust that the time may not be far distant, when the city, the hospitals and the medical profession, may see the way clear for the establishment and maintenance of such a system.

Meantime the community is in no position to criticise the present arrangement. It is infinitely better than nothing at all.

G. SEELEY SMITH.

GIVE THE YOUNG MAN A CHANCE.

The following is taken from a recent issue of one of the morning papers published in this city and refers to a certain hospital located well in the busy portion of the city:

“A feature of the institution is the immense amount of free work done in the dispensary. All throughout the year, including both the college term and the five months’ interval between terms, work has been going on there, and upwards of fifty patients per day have been treated. A short time ago a careful and conservative estimate was made of the amount which these patients would have to pay were they treated in private practice at ordinary rates, and the total sum was found to be more than \$75,000.”

Divide this \$75,000 among the physicians of this city who are making \$1,000 or less per annum and what a boon it would be to them. If this clinic is doing \$75,000 worth of free work, how much is Lakeside Hospital clinic doing? Add to that the free work done at Charity Hospital clinic, Cleveland General Hospital clinic, St. Alexis Hospital clinic, and the work of the many smaller clinics scattered throughout the city, and a conservative estimate would bring the grand total at least to \$250,000 of free work per year, a sum which if divided pro rata among the physicians of Cleveland would give each one \$250. What sort of a chance has a young man who has departed from the fostering care of his Alma Mater got when the greatest competitor he has is the clinic connected with the very school from which he graduated? Does it not seem a little odd for a school to take a man's money in return for a medical education, graduate that man with a great blare of trumpets and then play a game of freeze-out on him when he tries to use the information he paid for to obtain an honest living?

WM. CLARK.

READ AND CONSIDER.

In presenting the subject of ectopic pregnancy, a writer, in a journal recently to hand, relieves himself of an effusion which we consider too good not to let our readers have the benefit of. The effusion in part is as follows:

"This is a subject of exceeding interest, great importance, and transcendent pathological beauty, that grows larger and larger and more attractive as we study it from time to time.

"To-day, the great masses of the medical profession stand like dwarf Moseses with the cob-webs of ignorance, dust, indolence, doubt, prejudice, envy and procrastination beclouding their brains—standing on the Mt. Nebo of incompetence, superstition, and doubt, appropriating to themselves the euphonious title of gynaecologist *per se*, when they are only cervix peepers and painters, and spectacularizers, minus the tactus eruditus, pathology, and the digital diagnostic touch.

"Each physician in general practice should stand as a lighthouse in the causation, pathology, symptoms and diagnosis of tubal occlusions, ectopic pregnancy and intrapelvic disease; and, like an Ida Lewis, should hear the cry of distress in ectopic tubal rupture, discern the expression of anguish in the woman's face, her mind active with the thought of some great commotion within

her, like a Johnstown flood, because the ectopic tubal dam has given way, or feeling that on life's tempestuous sea, with the tempest rising higher and higher, and billows of mental anguish around her roll, her boat has sprung a leak, is dipping and drifting further and further away. Physicians, will you diagnose in time tubal rupture, take or bring the surgical life-boat to these mothers, wives,* sisters and daughters? Remember, you are to "send out the life-boat, for some good woman is perishing to-day; throw out the life-line, for some one is passing away." Do not doubt and dilly-dally, but take to the surgical life-boat of the skilful, erudite, rapid, bold, conservative, life-saving operator."

Comment is unnecessary. Every reader will see the necessity of pondering on this matter.

CLEVELAND MEDICAL LIBRARY ASSOCIATION.

New books to be found on the shelves of the library.

Purchased:

- Cullen T. S. Cancer of the Uterus, etc., 1900.
- Berkeley H. J. A Treatise on Mental Diseases, etc., 1900.
- Cheyne & Burghardt. A Manual of Surgical Treatment, etc., 1900. (Vols. 2, 3.)
- Ohio Medical Directory, 1900.
- Reference Hand-book of Medical Sciences. Edited by A.H. Buck. (Vol. 1, 1900.)
- Progressive Medicine, Dec., 1900.

Donated by Secretaries:

- Transactions of the Louisiana State Medical Society, 1900.
- “ “ Indiana “ “ “ “
- “ “ Texas “ “ “ “
- “ “ Association of American Physicians.
- (Vols. 4 to 14, 1889 to 1899.)

Proceedings of the Nebraska State Medical Society, 1900.

Donated by:

- Dr. Alfred E. Stengel. Contributions from the Pepper Clinical Laboratory, 1900.
- Dr. S. W. Kelly. Report of State Board of Health of Michigan, 1897.
- Dr. H. E. Handerson. Life of Sir H. Halford, 1895.
- Dr. H. H. Powell. Grandin & Jarman. Practical Obstetrics, 1898.
- Dr. C. J. Aldrich. Garrigues H. J. A Text Book of the Diseases of Women, 1900.

Surgeon-General U. S. Army. Vol. 5, Index Catalogue
Surgeon-General's Library, "Enamel-Fjuner."

CLEVELAND MEDICAL LIBRARY ASSOCIATION.
NURSES' BUREAU.—NEW MEMBERS.

Miss Agnes L. Schwab, graduate Cleveland General Hospital.
Mrs. Mitchell, graduate Pittsburg Training School.
Miss Ida German, graduate, Toronto, Canada.
Miss L. Rudolph, " Linn, Mass.
Miss L. Klinger, " St. Clair Training School, City.
Miss S. E. Osborn, " " " " "
Miss Anna Pepper, " City Hospital Training School.
Miss Walsh, " " " " "
Miss M. Trappe " " " " "

EXPERIENCED NURSES.

Mrs. Ira Manchester,	Miss T. Donovan,
Miss Etta M. Stockwell,	Miss M. A. Reynolds,
Miss Eva McIntosh,	Miss M. Payne,
Miss Catherine Johnston,	Miss Mary Hayden.

New Books.

CLINICAL EXAMINATION OF THE URINE AND URINARY DIAGNOSIS. A Clinical Guide for the use of Practitioners and Students of Medicine and Surgery, by J. Bergen Ogden, M. D., Instructor in Chemistry, Harvard University Medical School; Assistant in Clinical Pathology, Boston City Hospital; Medical Chemist to the Carney Hospital; Visiting Chemist to the Long Island Hospital, Boston. Illustrated. Philadelphia. W. B. Saunders & Co. 1900. Price \$3.00 net.

While smaller and larger works on chemical urinalysis, as well as pathology, exist, those combining both, *i. e.*, the chemic examination of urine, with their clinical import, are but few. The more recent edition of the classic work of Neubauer and Vogel, as well as others not as pretentious and exhaustive, are beyond the scrutiny of the American student or doctor who is not thoroughly acquainted with the language in which they have been originally written. Therefore, the present volume, clean cut and honestly written, is sufficiently thorough and up-to-date for the most exacting medical man. Little, if any, unfavorable criticism can be offered in a cursory glance through its interesting and instructive pages. In a general way, we might say, however, that methods of technique which the busy chemist finds a necessity for

accuracy, might also be used by the physician. Thus precipitates, which it is almost impossible to wash by throwing on a filter, are usually washed by decantation, before being finally brought upon the filter to drain. Further, practically ash-free filters have been on the market for years, and will save much time and trouble in ignition. The work, divided into a chemic and microscopic part and a diagnostic division, is excellently done, should be in the hand of every student and practitioner, as it is commendable and trustworthy. The author is to be congratulated and the publishers complimented for their unity of skillful action. SPENZER.

A MANUAL OF MATERIA MEDICA AND PHARMACOLOGY. By David M. Culbreth, Ph. G., M. D., especially designed for students of pharmacy and medicine, etc. Second edition, Enlarged and revised. Lea Brothers & Co., Philadelphia and New York. 1900.

An excellent, large and comprehensive text-book of organic and inorganic materia medica. Profusely illustrated with four hundred and sixty-four well-made cuts. It must prove a popular and interesting manual for under classmen in schools of medicine and pharmacy, as well as practitioners of each. The present edition is vastly superior to the first, and appears to be up-to-date; contains much more of the pharmacology of the drug, as well as the therapeutic application of the same.

The book as a piece of bookmaking is magnificent, and shows to what expense and care the publishers will go to uphold their enviable reputation.

All in all, the standing of the author as a teacher, its up-to-dateness, and the valuable contents within its covers, makes it a volume to be prized by its possessor, and to be retained by him.

SPENZER.

A TREATISE ON DISEASES OF THE NOSE AND THROAT. By Ernest L. Shurly, M. D., Vice President and Professor of Laryngology and Clinical Medicine, Detroit College of Medicine; Laryngologist and late Chief of Staff, Harper Hospital; Consulting Laryngologist and Chief of Laryngological Clinic of St. Mary's Hospital; Consulting Laryngologist to the Woman's Hospital and Foundling's Home; Member of the American Laryngological Association; of the American Climatological Association; of the American Medical Association; of the Michigan State Medical Society, etc. Illustrated, New York. D. Appleton & Company. 1900.

In recent years a number of good works on diseases of the nose and throat have been presented to the profession, but the

work of Dr. Shurly bears comparison with all of them. The author deals with each subject from the standpoint of practical experience, which makes it especially valuable to the general practitioner and student, for whom it is written. The arrangement of the chapters and subjects is commendable. The language is clear and to the point. The illustrations, many of them original, are good, the colored plates in the rear of the book deserving special praise. On the whole the work is deserving of our recommendation and the support of the profession in general.

ANOMALIES OF REFRACTION AND OF THE MUSCLES OF THE EYE. By Flavel B. Tiffany, A. M., M. D., Professor of Ophthalmology and Otolaryngology of the University Medical College of Kansas City, Mo.; Oculist and Aurist to the University Hospital; Oculist to M. K. & F. R. R., etc. Author's fourth edition. Kansas City, Mo. Hudson-Kimberly Publishing Co., 1900.

The author has succeeded in giving to the profession a very excellent text-book upon the subjects treated. The book is elementary, as a text-book should be. It contains the principles of optics as applied to ophthalmology, also a clear description of the eye and of the mechanism of accommodation. It is profusely illustrated, the text is clear and well arranged. It will be found of particular value to those who want to drill themselves, either by private study or in taking courses at an ophthalmic institute.

A pleasing feature, to those interested in that particular direction, is the biographical sketches of Prof. von Helmholtz, Prof. Donders and Prof. Edmund Landolt, which occupy the first several pages of the book.

EDWARD LAUDER.

A BOOK OF DETACHABLE DIET LISTS. For Albuminuria, Anaemia, and Debility, Constipation, Diabetes, Diarrhea, Dyspepsia, Fevers, Gout or Uric Acid Diathesis, Obesity, Tuberculosis, and a Sick-Room Dietary. Compiled by Jerome B. Thomas, Jr., A. B., M. D. Instructor in Materia Medica, Long Island College Hospital; Assistant Bacteriologist to Hoagland Laboratory. Second edition, revised. Published by W. B. Saunders, 1900. 925 Walnut street, Philadelphia, Pa. \$1.25.

This is just what it says it is on the title page, "A Book of Detachable Diet Lists." The number of pages allotted to each disease is in proportion to their relative frequency. The diets are well selected and liberal enough to satisfy the most pernickety of patients. The physician who pays attention to the therapeutic value of dieting, and we presume all do, will find this a very useful book.

GENITO-URINARY SURGERY AND VENEREAL DISEASES. By J. William White, M. D., Professor of Clinical Surgery, University of Pennsylvania, and Edward Martin, M. D., Clinical Professor of Genito-Urinary Diseases, University of Pennsylvania. Illustrated with two hundred and forty-three engravings and seven colored plates. Fourth edition. J. B. Lippincott Co., Philadelphia; London, 36 Southampton street, Covent Garden. \$6.00.

The rapid advance in genito-urinary work is quite a sufficient excuse for presenting a new work on this subject—thoroughly up-to-date. When one looks at the work presented by the authors—a work of some 1,050 pages—containing hardly a repetition of an idea or statement, being clear, concise—yet every subject connected with this work thoroughly treated, he begins to realize that genito-urinary and venereal diseases can claim its place among the many specialties in medicine; and it is works of this sort that raises this specialty in the eyes of the general practitioner, inciting him to study closely those conditions, sadly neglected heretofore, and which contribute so much to the income of the quack. One characteristic of this work is that nothing is left to imagination of the reader. Every little detail, even to the proper introduction of a sound, is clearly described and illustrated. Special emphasis is laid on urethral antisepsis and surgical technique. Subjects such as urethral fever and gonorrheal rheumatism, so little treated in works of this nature, are well covered in this work.

Two chapters, one on examination of urine, the other on *psycopathia sexualis*, could very well be omitted as one chapter to each subject is only sufficient to merely mention the different points treated in works of a larger nature.

The paper, printing and binding are first-class and the publishers are to be complimented on putting such an excellent work on the market.

WM. CLARK.

Society Proceedings.

May L. Bassett, Medical Reporter.

CUYAHOGA COUNTY MEDICAL SOCIETY.

Regular Meeting, November 1, 1900.

The regular meeting of the Cuyahoga County Medical Society was held on Thursday evening, November 1st, at the Medical Library building. The meeting opened with the president, Dr. C. J. Aldrich, in the chair. The minutes of the last meeting were read and the following members elected: Drs. W. H. Mer-

riam, R. G. Schnee, I. Biskind, A. J. Skeel, G. H. Fitzgerald, I. J. Proper, Martin Friedrich, H. B. Ormsby, N. C. Yarian, F. Y. Allen, C. A. Hamann, Wm. Clark, A. W. Lueke, J. E. Kogan, G. Seeley Smith, Ernest Lueke, W. G. Stern and H. C. Krumrine.

The following resolution was received from the Cleveland Medical Society with a request that the Cuyahoga County Medical Society should adopt a like measure:

Whereas, In the examinations about to be conducted by the Ohio State Board of Medical Registration and Examination to determine the fitness of intending matriculates in the various medical colleges of the State, the Board has provided a standard of education equal to little more than one-third of that required in a high-school course;

And, Whereas, the plain intent, if not the exact letter, of the new medical practice act establishes a four years' high-school course as a minimum educational standard to be required of persons desiring to enter upon the study of medicine in Ohio;

Therefore, be it resolved, That the Cleveland Medical Society, assembled in regular meeting, earnestly urges the State Board to reconsider its action in so far as future examinations are concerned, and to carry out conscientiously the plain intent of the new medical practice act in the matter of the standard of preliminary education to be required of persons desiring to study medicine;

And be it resolved, That it is the sense of this Society that such enforcement of the law is desired by the whole medical profession of the State, in order that medical education and the standard of the profession in Ohio shall be put upon a plane of equality with those of other States;

And be it resolved, That the secretary of the Society shall acquaint the Ohio State Board of Medical Registration and Examination with the action of this Society, by transmitting to the Board a copy of these resolutions;

And be it further resolved, That the secretary of this Society shall be instructed to communicate with the other medical societies of the State, the county and district societies and the Ohio State Medical Society, asking that they take similar action in regard to this important matter.

Adopted unanimously by the Cleveland Medical Society, September 14, 1900.

HENRY S. UPSON, *President*,
WM. O. OSBORN, *Secretary*.

Dr. Tuckerman moved that these resolutions be adopted as the sense of the Society, which motion was seconded. Dr. A. R. Baker thought the requirements of the examination had been sufficient in those branches covered, and while he did not wish to object to the motion, yet thought the Society rather unjust in its criticisms of the Board, as he thought the Board had endeavored to cover the requirements carefully in the examination. Dr. Tuckerman stated that Prof. Harris had expressed the opinion that he could take a boy from grammar school and prepare him to pass this examination in less than a year and a half, thereby proving that it did not cover a high school course, as was the intention of the framers of the new law for medical examination. After the reading of a part of the questions of the last examination, the resolution was passed.

The president brought up the question of the publication of the recently given "Symposium upon Appendicitis," and the Society after discussion voted to publish it. A committee upon publication was appointed as follows: Drs. Lauder, F. C. Herrick and Foote.

The regular program of the evening was called and the following rendered:

Dr. H. E. Handerson.....	A Short Memoir of Richard Bright.
Dr. R. G. Schnee.....	Pathology of Acute Nephritis.
Dr. A. W. Lueke.....	Etiology of Acute Nephritis.
Dr. Martin Friedrich...	The Laboratory Diagnosis of Nephritis.
Dr. F. A. Payne.....	Prognosis of Acute Nephritis.
Dr. John Perrier.....	Treatment of Acute Nephritis.

DISCUSSION.

Dr. Tuckerman: One of the speakers this evening has mentioned the use of pilocarpin and its dangers. In relation to this I would say that the danger can be very effectively guarded against if strychnia be used in combination with it, and there is a fact in the use of pilocarpin which I have not seen mentioned as prominently as it should be, and that is that pilocarpin, given in quantities just short of the amount required to produce diaphoresis, is a very active diuretic where the ordinary diuretics are inert.

Dr. Aldrich: The French recognized this use of pilocarpin just mentioned and used it by the inunction method, rubbing in the back a grain of the alkaloid with a dram or two of lard over the kidneys, and they think that they have secured the diuretic effect in this way without the depression. I have used it in this

way myself but have not noticed very marked good effects. The cases were few, however, and further observation may show it to be of value.

Dr. Tuckerman: The use of one-fortieth to one-twentieth of a grain by mouth or hypodermatically will ordinarily give this result.

Dr. Yarian: I would like to ask relative to acute nephritis being caused by tuberculosis, as one of the speakers has stated, whether a true nephritis results in these cases or is it an albuminuria more or less transient?

Dr. Lueke: In tuberculosis we get an absorption of pus from the cavity which may give a true nephritis, and we may get any period or stage of nephritis from acute nephritis to acute parenchymatous nephritis and fatty degeneration.

Dr. Aldrich: One of the gentlemen has brought up the question of cold as a causative factor in acute nephritis. I should like to hear from others of the gentlemen on this point, as it has always been an interesting question to me. Take, for instance, the well-known germ of pneumonia that may remain in the mouth for years without taking upon itself any virulent process in the lungs until there comes a sudden lowering of the vitality of the system, as by a cold, when it becomes active at once. Schiff and other scientists have called attention to the action of certain proteid bodies within the blood which are protective to a varying degree. When from chill and consequent lowering of the vital functions of the body these protective bodies become weakened, is it not reasonable to believe that we have an unimpeded absorption of the ptomaines from the gastro-intestinal tract sufficient to poison and inflame the kidneys?

Dr. Tuckerman: I should like to call attention to one of the causes of acute nephritis in scarletina and measles, and that is that large doses of chlorate of potash are often given for the sore throat. Jacobi called attention to this many years ago, and it is something that should be borne in mind by every physician and guarded against, as the old ladies are liable to come around and advise large doses of chlorate of potash, and it is often given when the physician knows nothing about it, and then trouble results.

Dr. Quirk: I should like to ask whether anyone has observed any relationship between the morphine habit and Bright's disease? It has been my fortune to meet a number of cases of morphine habit which contracted Bright's disease, and it has led me to think that maybe there was some relation between the two.

Dr. Moorehouse: When your president was reading his article on syphilitic nephritis, one remark which he made in regard to treatment interested me very much and reminds me indirectly of a case I saw some time ago. He remarked that if the case was one of nephritis from mercury, you should omit the mercury, but if from specific poison, you should continue the mercury. This suggests to me the only case I ever saw of typhoid fever associated with a well-marked nephritis. Of course we often see a moderate amount of albumin with a few casts in typhoid, but in this case the condition was exceedingly marked. For 72 hours or more the usual treatment of cold baths was withheld on account of the renal complication, until at length the condition of the patient as a typhoid was getting visibly worse and the renal complication, to say the least, no better when baths were resorted to with hesitancy. From that time improvement began and the patient went on to recovery. Ordinarily it is not in the power of the physician to combat the underlying cause of an acute nephritis, and his efforts are of necessity directed to the treatment of the nephritis alone; the lesson from such cases as these would seem to be that when there is an underlying cause, treatment directed toward its removal should be the first aim of the physician.

Dr. Knowlton: I want to say a word this evening upon a topic and connected with the regular order of business, and that is about the vaccine virus that is being sold now. I think some discussion of this does not come amiss, for there are many cases of it in Cleveland and surrounding towns. Before the first outbreak of it a couple of years ago I had a great deal of trouble in obtaining a good article of vaccine virus, sometimes would not get a good point out of half a dozen, and sometimes would vaccinate the same person several times without satisfactory results. Then when the excitement about small pox occurred here I had good vaccine and good results as long as the epidemic lasted. After the excitement and talk died out I began to have trouble again to get either points or lymph to work, and of late I have had no satisfactory results at all. I have tried Parke, Davis & Co.'s, and Stearns' and Mulford's glycerinated lymph. I have bought none here in the city except from one druggist. He has written to Parke, Davis & Co. and asked them about the matter. I have mentioned this because I would like to know if others are having as much dissatisfaction with the vaccine lymph as I have had. If they are, it is high time something was done. During the mild epidemic here I used Mulford's lymph and had no trouble with it.

During the last three months I have vaccinated 15 children and not one of them has taken. My druggist tells me that another doctor has had a similar experience with all these firms.

There is certainly a fault somewhere. It is not in the change of people nor the lessened action of good virus. I have had trouble once before and have vaccinated over and over again to get results. I had no difficulty for a time and then for another period I had a great deal of difficulty, so that there must be a fault somewhere. As I say, during the time when the conditions existing in this city as to small pox drew attention to us I had no difficulty in getting good vaccine. Now if the State is going to compel vaccination they should see to it that people have good vaccine virus. The State should take this matter up and compel firms to furnish a reliable article of vaccine. I think the druggist I have dealt with when I got the vaccine here is an honest man, and has secured just as fresh vaccine as he could obtain, so I do not think the fault lies with the druggist.

Dr. Jones: I have had the same difficulty. Last year during the time that smallpox was in our neighborhood I had no trouble with the vaccine, but during the last few weeks I have not had a point that took. I have thought that perhaps there being less demand for it, the druggists might keep it on hand too long and that would account for it.

Dr. A. J. Skeel: I was a district physician, and during the year of the epidemic I used to get as many as 85 per cent. of cases which took, but of late I have not had over 10 per cent. by primary vaccination. I, too, inferred at first that the vaccine was old, but I sent to Parke, Davis & Co. for fresh vaccine and received from the use of the fresh vaccine exactly the same results.

Dr. Jones: I think it would be a good thing if the Society would take action upon this, so I will move that a committee be appointed to write to these manufacturers and find out why we do not get better results from the use of the vaccine.

This motion was seconded and discussion was called for.

Dr. McGee: My experience with the Mulford's tubes has been as good as that of previous years. I should think probably three-fourths of them have taken, and I have used them quite frequently during the past two months.

Dr. Ormsby: Might it not be true inasmuch as our epidemics are not as violent as they were that we are getting immune to the disease and that later generations are not as susceptible to it, so that the vaccine does not act in as many cases as formerly?

Dr. Hanson: This is a very important question, especially when at this time in the year there promises to be a great deal of smallpox. I have had this same difficulty with the virus, as, for instance, in one family a child came down with smallpox and I immediately vaccinated the other six members of the family, with fresh glycerine lymph, but in spite of this every member of the family had smallpox, not one vaccination having taken. It became a question in my mind whether it would not have been better to have vaccinated every one of these children with humanized virus than to have used the glycerinated lymph, for it is well known that the former is more sure to act, and in cases like above certainty of action is especially desirable.

Dr. Campbell: I wish to say that I visited the Mulford factories when on my trip East, and while making a tour of the factory I asked them how long they calculated the virtue of a tube of glycerinated lymph would keep. They replied only about a week in warm weather, but in cool weather in hermetically sealed tubes about 30 days. With regard to the lymph, I know that it is hard to get that that is good, but is it not true that it may be our fault in not allowing sufficient time for the vaccine to dry when we use it? I think Dr. Knowlton's suggestion is a good one, that the State should look after this matter. But we should be sure on our part to allow at least half an hour for vaccine to dry or absorb before allowing the patient to go.

Dr. Oswald: I did not expect to take any part in this subject, but I cannot refrain from saying a word or two on the other side of the question. I think a large part of the difficulty comes from having too much haste in using the vaccine rather than in the failure of the virus, for I have vaccinated about two hundred cases in two years and have not had one failure, not a single one! I allow half an hour, or more, in every case for the vaccine to dry and did not have a single failure. I frequently do two, and have done three children with one tube.

Dr. Jones: I wish to add that I have allowed the half hour—used the same method I have used before when I have had good success, so that cannot be the cause of failures of my cases.

Dr. Skeel: I have no doubt but that when we were having an epidemic the vaccine virus was always fresh, for we were having so much excitement and agitation that it was to the interests of dealers to furnish a good article. The Parke-Davis Company claim that the vaccine will keep four or five months in the hermetically sealed tubes in cold weather, but that it deteriorates very

rapidly in warm weather. I have ascribed bad results from vaccine this summer to the failure of its keeping qualities in hot weather.

Dr. Aldrich: I do not know whether the method I use in vaccinating is original with me or not, but I would say that I have followed a method something as follows: I take an ordinary piece of adhesive plaster and cut out a small opening large enough to admit the palce vaccinated, so that it will be in the center of it without being touched. Then I lay over this another piece of adhesive plaster, so that the place is protected and is not touched by anything until dry. Its removal in 24 hours is further directed.

The question was called for and the vote resulted in the carrying of the motion.

The Society adjourned.

CUYAHOGA COUNTY MEDICAL SOCIETY.

November 15, 1900.

The adjourned meeting of the Cuyahoga County Medical Society was held on Thursday evening, November 15th, at the Cleveland Medical Library, the President, Dr. C. J. Aldrich, in the chair. The minutes of the previous meeting were omitted and the regular program of the evening was called.

DiagnosisDr. A. J. Skeel
Acute Hemorrhagic Nephritis in Children.....Dr. E. P. Carter
Acute Alcoholic Nephritis.....Dr. H. B. Ormsby
Acute Nephritis from Chemical Toxic Agents..Dr. J. G. Spenser
Acute Syphilitic Nephritis and Report of Two Cases.....
.....Dr. C. J. Aldrich

DISCUSSION.

Dr. Hanson: There is one point that I have had a little experience in that I desire to speak about, and that is in regard to suppression of the urine in acute inflammations of the kidney. I have tried everything that has been advised, I think, and would say that I have never obtained such complete relief from suppression of the urine as by active purging with elaterium.

Dr. Campbell: I notice there has not been very much said about the treatment in these cases of acute nephritis. Perhaps the reason is because we all know that diaphoresis and quick cathartics are the best procedure. I believe in the use of elaterium because we certainly do get quick results from its use. I would

like to ask Dr. Spenzer, as a chemist, whether there is any danger in the continued use of calomel in these cases, that is, for a week or several days?

Dr. McGee: If I remember rightly I think Dr. Spenzer said in his paper that both sulphonal and trional were followed by hemoglobinuria*. I would like to ask him if he has found this true of trional in every case. It does not seem to me that it would be as active in causing this condition as sulphonal. Trional is said to be decomposed in the system and it is claimed that the decomposition products do not irritate the kidneys in their elimination; while sulphonal is excreted unchanged, and by its irritative action on the renal structures, tends to produce this condition. I would like the opinion of the doctor as to the relative frequency of this condition under the use of the two drugs.

Dr. Spenzer: Perhaps the best way in which I can explain this is by saying that sulfonal, trional and tetronal are closely related and are derived from the same nucleus; for instance, in sulfonal the carbon atom, all that remains of the methang group, is united by two bonds to two methyl groups, by the two others to two sulfonal groups, which latter in turn are further bound to two sulfo groups, and thus we have diethyl-sulfon-dimethyl-methane. In the case of trional, one of the methyl groups in sulfonal is replaced by ethyl, in tetronal the last methyl remaining in sulfonal, has a further ethyl substitution. Therefore trional is diethyl-sulfon-methyl-ethyl-methane, and tetronal is diethyl-sulfon-diethyl-methane. I am able to see how the successive substitution of ethyl for methyl, as just cited, may make trional and tetronal more actively irritating to the kidney, than sulfonal; whether this is because the sulfo-groups are more easily split off in the two former than in the latter, I am not prepared to say. It is, however, nevertheless a fact, as Dr. McGee has stated, that sulfonal does contain a larger percentage of the sulfo-group per weight of drug than the other two. Kast claims to have mitigated or entirely removed the bad effects of sulfonal by keeping the daily dose below thirty grains, and by discontinuing it for several days, after it has been taken for a week. In regard to Dr. Campbell's question I will say that in an otherwise healthy kidney I do not believe calomel will occasion nephritis after a week's usage. But calomel can, and does, cause nephritis, through the formation of a double mercury-calcium albuminate, which is deposited behind the secreting cell of the tubule, thereby causing irritation, inflammation and death of the epithelium. I should

think that elaterium would act nicely as a cathartic, but of course it has no diuretic action.

Dr. Jones: In regard to the question, I wish to say that I had two cases recently, one a case of acute nephritis following scarlet fever of a mild type. The child was in school with a scarlet fever rash upon her body and the family thought nothing very much about it as being anything serious until the symptoms of fever began to develop. I was called to see the child and found it to be a case of scarlet fever with a very mild eruption. The child got along very nicely for about three weeks after the beginning of the attack and then began to seem to convalesce very slowly. She was not doing well at all so I examined the urine and found the presence of albumin. There was another child in the house who had not been at all well and though I could not find that it had had symptoms of scarlet fever or any history of an illness, yet I found on examination of the urine that there was albuminuria. The question that arose then was this second case of nephritis also produced by scarlet fever. I learned later that the child had been subject to convulsions for a long time. Later I was again called to attend this second case and was told that there was some kind of a beating in the abdomen. I asked where it was and found on examination that it was in the lower part of the abdomen and that there was a region of tenderness there in which irregular spasmodic contraction could be felt. While examining it the child had a general convulsion. I found that she had had another attack previously that day. The albumin found in the urine in the second case makes me question whether this second case was due to scarlet fever or a long standing epileptic condition, and albuminuria connected with convulsions of three years' standing.

Dr. Belt: The subject of nephritis is an interesting one, especially that variety most commonly met with, acute scarletinal nephritis. With reference to treatment I may state that I have used all the remedies recommended for this form of nephritis familiar to the profession, but none of them in my estimation fulfill the indications that the compound jalap powder does, given in half drachm or drachm doses every three hours until free catharsis has been established.

There is not the same difficulty in procuring a reliable preparation of it as there is with elaterium and the dose is more easily adjusted, a matter of no small moment in the case of children. Calomel is a useful adjunct when coma is present or deglutition difficult from any cause. I regard the treatment by pilocarpine

as positively unsafe and a reliance on diaphoresis by other means altogether inadequate.

Dr. Aldrich: On the question of acute hemorrhagic nephritis as a result of heat, as mentioned by Dr. Carter in his paper, I wish to say that I have seen a case, in consultation with Dr. Smiegel, which was in all probability caused by heat. It was a hot day in July, and the patient was a furnaceman working in one of the plants in Newburg. He was returning from his work when he was noticed to stagger and have great difficulty in walking. He went to bed on reaching home, and when I was called to the case I found him with a very low temperature, in spite of his having been subjected to such heat. The man died from suppression of the urine, never recovered consciousness, and from the albumin and other elements found in the urine it was thought that he was suffering from hemorrhagic nephritis. Later examination supported that theory. Dr. Carter made the statement that these patients usually died in three days. About a year ago Dr. Hoover saw a case of hemorrhagic nephritis of scarletina origin. There were three children in one family who had sore throat, fever and other symptoms of scarlet fever, with but one, however, who had an eruption. I was called to see the one that had the slight eruption. None of the other children were thought to be ill enough at the time to need a physician's attention. I was not asked to see a three-months-old child who was lying asleep in the cradle, but I was astounded to observe a marked Cheyne-Stokes respiration. In 24 hours the child died from an attack of hemorrhagic nephritis. Nephritis resulting from salicylate of sodium has not been mentioned to-night. It is a well-known fact that albuminuria may be due to the action of large doses of this drug, and cases of real nephritis from moderate doses have been reported. Rheumatism is also a known cause of nephritis, or more correctly, perhaps, the toxins which cause rheumatism will occasionally produce nephritis. If one should be treating acute rheumatic fever with salicylates, and signs of nephritis should develop, it would be a question of moment to decide if the renal complication was due to the salicylate or rheumatism. If it was due to the former its administration should stop, whereas if due to rheumatism it should be pushed on the same hypothesis as suggested.

Dr. Ormsby: I am sorry we did not have Dr. Powell's paper on "Nephritis in Pregnancy" to-night, because I am especially interested in it from having recently seen a case of it. I was

engaged to confine Mrs. K., primipara, and one day, when about $6\frac{1}{2}$ months pregnant, she came to my office, and I was surprised to note that the woman was all swollen up, her face and arms and body bloated, and her feet so swollen that she could not get her shoes together. I asked her what was the matter, and she said "Nothing;" and when I remarked on her bloated condition she said, "That is nothing; we all have this." I said nothing more to her and went to her husband to inform him of my fears for her, and asked him about the condition of the kidneys. He said that she got up twenty or thirty times in a night to urinate and passed but little urine. He said that he would see that she came down to the office the next day, but before the next day I was called to attend her and found her in convulsions. Examination revealed a fetus in transverse position and urine loaded with albumin. I was unable to turn the child by external manipulations. I gave hot pack, but it did not relieve, and then I gave diaphoretics. After a time the edema went down and I let her get upon her feet again. In a week she was worse again and I was called. I produced a delivery, reversed the fetus and brought the head down, and the woman recovered. The child lived a week in cotton, and the mother's recovery dated from the delivery and the administration of cathartics.

Dr. Spenser: I would think, the physiological action of the morphine would have nothing to do with the nephritis. Morphine is, of course, a stimulant unless taken in large doses and then it acts depressant. The use of alcohol, taken as a substitute for morphine, is more probably a cause of the nephritis.

There is one point in connection with the discussion which I wish to speak about, and that is, it has been a great source of surprise to me that the general practitioner does not examine the urine in his cases for himself, instead of sending it to another for analysis. He can observe better for himself than anyone else can do, and there are many things about a case which he might learn by personal examination. Further, many times the urine is not examined immediately when sent and spoils before it can be done, so the examination is not as reliable as his own might be. I would advise young and all general practitioners to examine for themselves.

The Society adjourned to meet again in two weeks.

Notes and Comments.

Dr. and Mrs. Hunter Robb spent Christmas vacation at Burlington, N. J.

Dr. N. Stone Scott has left for a few weeks' stay on the Bermuda Islands.

Dr. C. M. Hole, 300 Cedar avenue, was married Nov. 22 to Miss Carrie McArtor.

Dr. Walter Lincoln is in Philadelphia on account of the illness of his father.

Dr. F. L. Chadwick, of Euclid avenue, was seriously ill with pneumonia during the past month.

Dr. A. S. Henry, corner of Quincy and Florence streets, was married October 31 to Miss Kate Stoddart, of Toronto.

Dr. N. S. Dalrymple, of the class of '77, University of Wooster, died suddenly at his home in Pasadena, Cal., of heart failure, November 1, 1900. After graduation the Doctor practiced a short time at Pittsfield, Pa., and then at Bedford, O., later removing to Warren, O. In the fifteen years of practice in Pasadena he had established himself in a good practice and was one of the substantial citizens of his progressive town. He always retained an interest in his alma mater and welcomed his Ohio acquaintances with a generous hospitality.

At the last meeting held by the Lorain County Medical Society at Lorain, the following officers were elected for the ensuing year: President, Wm. Bunce, M. D.; Vice-President, E. Cameron, M. D.; Secretary, A. M. Webster, M. D.; Treasurer and Librarian, F. Young, M. D. The next regular meeting will be held Tuesday, January 8th, 1901.

A. M. WEBSTER, Secretary.

Neurological and Psychological Section, Pan-American Congress. Alienists, neurologists and all interested are cordially invited to attend and read papers or engage in the discussions of this section of the coming Havana congress, which holds from February fourth to eighth, proximo. The following have thus far been offered from this country: Prof. D. R. Brower, Chicago, on "Cerebral Neurasthenia; Observations on Diagnosis and Treatment"; Dr. T. D. Crothers, Hartford, Conn., on "Morphinism and Crime"; Dr. Albert S. Ashmead, New York City, on "Possible Cause of Insanity Among Americans in the Orient"; Dr. C. H. Hughes on "Autopsychorhythmia, or the Repetition Psychoneurosis; an Inquiry into a Condition of Morbid Rhythmic Cerebral Automatism and its Rhythmic Forms of Mental Alienation." A paper has been promised by Dr. H. N. Moyer, Chicago.

C. H. HUGHES, M. D., St. Louis, Mo.
Secretary Section Nervous and Mental Diseases.

THE Cleveland Medical Gazette

FEBRUARY, 1901.

Original Articles.

Symposium on Nephritis.

PAPERS PRESENTED AT THE MEETINGS OF THE CUYAHOGA
COUNTY MEDICAL SOCIETY, IN CLEVELAND, BEGINNING
1ST NOVEMBER, 1900, AND CONTINUING ON THE
FIRST AND THIRD THURSDAYS OF THE
MONTH UNTIL FINISHED.

(CONTINUED FROM PAGE 159.)

ACUTE NEPHRITIS—SYMPTOMATOLOGY.

BY OREN E. GEORGE, M. D.

An attack of acute nephritis begins in one of two general types. The one is ushered in by a severe chill, severe pain in the back, which may be confined to one or both sides, pain in course of ureter with retraction of testicle. The nervous phenomena present are severe headache, usually frontal, delirium, convulsions, sometimes blindness in one or both eyes, and coma.

The chill is followed by high temperature, reaching 105 or 106, heavily coated tongue, sordes collect on lips and gums, foul breath, dryness of skin; occasionally there is profuse perspiration with odor of urine; the pulse is full and bounding, reaching 130 or 140 beats per minute; appetite is impaired, bowels constipated, and, preceding death, sometimes diarrhœa. There is dyspnœa, stertorous breathing, scanty secretion of urine, which on standing becomes thick from sediment contained in it. Later, suppression of urine, œdema of face, which quickly involves entire body and extremities so the features are scarcely recognizable. This form usually lasts from three to four days and terminates in death.

In the second type the attack comes on slowly, beginning with slight headache, nausea, vomiting, white-coated tongue, loss of appetite, feeling of malaise, dark spots before the eyes, occasionally some pain in loins, constipation; sometimes, however, there is diarrhœa, slight fever toward evening, increase in pulse rate and tension, œdema of lower eye-lids, gradually extending to all parts of body; frequently if disease continues it extends to serous, more particularly to peritoneal cavity, next pleural cavity, seriously interfering with function of lungs and heart, especially if pericardium is involved.

The urine is diminished in quantity, is highly colored and sometimes smoky in appearance, high specific gravity, reaching as high as 1,030 in some cases. If urine is allowed to stand, a sediment is deposited; albumin is present in nearly all cases, sometimes it is absent; casts are present, and white and red blood corpuscles are found in sediment; excretion of urea is diminished, which, if continued, may cause convulsion and coma, with partial or complete loss of sight. The skin becomes waxy in appearance and may, in favorable cases, remain moist, but usually dry. In favorable cases the symptoms subside, secretion of urine increases, œdema disappears, albumin and casts disappear, the sediment lessens and blood corpuscles are absent; pain and headache grow less and the patient rests most of time; appetite returns, temperature returns to normal and patient is convalescent. In unfavorable cases the symptoms increase in severity and follow course of first type, but of longer duration.

In some cases the acute symptoms persist when the nephritis may pass to the chronic form.

DIAGNOSIS.

BY A. J. SKEEL, M. D.

Demonstrator of Anatomy, Cleveland College of Physicians and Surgeons.

On account of the etiology of this disease the obtaining of an accurate history of the case is of considerable importance in establishing a diagnosis. The frequency with which acute renal inflammation follows or accompanies the infectious diseases makes their consideration a prime factor.

Of the infections scarlatina stands pre-eminently first, and it is noteworthy that with this disease acute renal involvement occurs much more frequently during the decline of the fever, and in

convalescence, than at the height of the disease. Mild forms of scarlet fever are frequently overlooked by the parents, and a physician first called upon the development of a secondary nephritis. Careful inquiry will usually bring out the fact that two or three weeks previously the child had some slight illness.

In a recent case of undoubted scarlet fever the parents assured me that the patient had just recovered from eczema.

With the other infectious diseases the kidney complications usually come on during the height of the disease. The gangrenous form of diphtheria is particularly liable to be complicated by a nephritis. In typhoid, pneumonia, erysipelas, pulmonary tuberculosis, small pox and meningitis it is also sometimes seen. Frequently a history of exposure to cold, especially while under the influence of alcohol, may be elicited. Pregnancy is quite often complicated by an acute nephritis, and should not be overlooked as a possible cause. It may occur with extensive burns. Finally the internal administration of such drugs as cantharides, turpentine, chlorate of potash, or the absorption of bichloride of mercury or carbolic acid may be the agency which has brought on the trouble.

The physical signs and the symptoms present may be sufficient to at once direct the attention toward the kidneys. The onset may be acute or may be several days in developing.

In a patient presenting such a typical combination of symptoms as headache, backache, nausea and vomiting, muscular twitchings, pallor of the skin and œdema of the eyelids and extremities, all coming on rapidly, a urinary examination will suffice to make the diagnosis certain.

Fever is by no means a constant symptom, being much more frequently present in children than in adults. On account of the nervous instability of children convulsions with them are much more frequently present. In other cases the symptoms are more mild, only slight pallor with puffiness of the eyelids, and a general feeling of malaise being present. Here again the examination of the urine may reveal marked changes, and is the test to which we turn for a decision as to the true state of affairs.

A third class of cases are those which are first seen in coma or convulsions. To this class belong severe cases; patients who are pregnant and children being especially liable to convulsions.

In children the frequency with which convulsions of a more or less severe character occur from comparatively trivial causes, may lead one to overlook the renal involvement unless its possibility be borne in mind.

Dropsy is an important sign in this disease, being rarely absent if the case is of several days duration. It usually begins with puffiness of the eyelids and face, oedema starting in this locality being quite characteristic of renal insufficiency. Oedema of the feet and ankles, however, frequently follows, and a general oedema invading the serous cavities, scrotum or labia, lungs and even the epiglottis may ensue. It must not be forgotten, however, that a severe acute nephritis may exist without anasarca.

There are no marked changes in the circulatory system. The pulse may be slow or may be unchanged. Cardiac hypertrophy or dilatation is not usually found in the acute form.

The urinary changes are the most constant and characteristic of all, and are consequently of the first importance in establishing a diagnosis. The quantity is usually very much diminished, ranging from 5-25 ounces in twenty-four hours, or there may be complete suppression in the severer forms.

The color and specific gravity are at first high, sometimes, however, diminishing later in the disease. This change, if occurring without increase in the amount of urine excreted is unfavorable.

Albumin is present usually in large quantities, but is not characteristic of renal disease since it may be found with any of the continued fevers, without pathological kidney change.

The presence of blood corpuscles, both red and white, casts of the large hyaline, granular and epithelial varieties, together with large quantities of albumin and diminished quantity of urine is almost diagnostic. The urine of chronic interstitial nephritis in no way resembles that of the acute form, being increased in quantity, light in color, of low specific gravity, with casts infrequent, and albumin when present found only in small amounts.

In chronic parenchymatous nephritis the urine is diminished in quantity and of a yellow color, sometimes turbid with urates. Granular, hyaline, and epithelial casts are found, together with evidences of fatty degeneration, such as fat globules, fatty casts, and renal epithelium undergoing fatty degeneration.

In an acute exacerbation of this form, red blood corpuscles may be present in abundance. If fatty casts, fat globules or other evidences of fatty degeneration are found the process is probably a chronic one. Otherwise a differentiation by means of the urine alone may be very difficult.

Here the history will usually present some evidence of previous trouble. The patient may show signs of more prolonged

illness, such as marked pallor and emaciation; the arterial tension is high and the heart may present evidences of hypertrophy. The fundus oculi will also usually show an albumenuric retinitis which would be absent in the acute process.

If convulsions be present they must first be distinguished from hysteria and epilepsy. In uraemic convulsions the urine contains albumin, in hysteria none. In uraemic convulsions consciousness is lost during the attack and the patient is stupid during the interval. In hysteria consciousness is neither lost during the attack nor the interval. In uraemia the spasms rarely attack the lower extremities. In hysteria this rule does not hold good.

In a case seen through the courtesy of my brother, Dr. R. E. Skeel, the patient was one of known hysterical tendencies. The family sent word that she was having one of her regular "fits." Physical examination revealed six months' pregnancy, and a sample of urine obtained by means of a catheter, and heated over a lamp in a tablespoon became almost solid with coagulated albumin.

In epilepsy there is usually a history of previous attack. The urine may contain a little albumin, but never casts or renal epithelium unless co-existent renal disease be present. In this case differentiation may at times be impossible. If the convulsions are uraemic but not of primary renal origin we may get indications of gastro intestinal disturbance, or of biliary torpidity.

Coma of uraemic origin must be distinguished from that of apoplexy, alcohol, opium or diabetes. In diabetes the history and emaciation, with the presence of sugar in the urine will be sufficient. In opium coma, the pin point pupils, and marked slowing of the respiration, sometimes reaching six or eight per minute are the most prominent characteristics. In apoplexy the pupils are unequal, and there is conjugate deviation of the eyes, the patient cannot be aroused and sclerotic arteries may usually be found. In alcoholic coma the breath gives the odor of alcohol, but serious mistake may be made if this is the only guide. Here the temperature is usually lowered, the face flushed, perspiration is free and the respirations usually rapid. The urine is increased in quantity, of low specific gravity, with no albumin or casts unless the kidneys are diseased. If urine is obtainable the presence of albumin, casts and renal epithelium is usually sufficient to indicate the uraemic origin of the trouble.

Finally it must be borne in mind that all uraemias are not of renal origin, but may be due to intestinal putrefaction, biliary dis-

case, articles of diet with excess of mineral substances, etc. Here the previous history will be of more value than any other one factor in the case.

LABORATORY DIAGNOSIS OF NEPHRITIS.

BY MARTIN FRIEDRICH, M. D.

Lecturer on Medicine, Cleveland College of Physicians and Surgeons;
Attending Physician to Out-patient Department, Cleveland General
Hospital; Visiting Physician to Cleveland City Hospital.

The diagnosis of parenchymatous nephritis, be it acute or chronic, is made in the laboratory. The urinary changes are in the vast majority of cases pathognomonic. These changes affect the daily amount of the urine and its composition. The amount is less, the solids are relatively increased, raising the specific gravity and causing a turbidity by their insolubility in the scanty water. Abnormal ingredients appear, as renal epithelium, blood, albumin and casts.

Epithelium of the uriniferous tubules points directly toward the kidneys. It is different with blood which may have an extra-renal origin. It is usually not difficult to distinguish between renal and extrarenal haematuria. In the former, the blood is intimately mixed with the urine, the red corpuscles are washed out, having lost almost all of the hæmoglobin and presenting under the microscope a mere ring (shadow). In the latter, the erythrocytes are better preserved and clots are likely to form. The best means of discovering blood in the urine is the microscope, the finding of red corpuscles leaves no doubt, while the spectroscope, chemical tests and Teichmann's hæmin crystals prove only the presence of the blood coloring matter which can get into the urine without hemorrhage as in cases of hæmoglobinuria.

Albumin, like blood, can have a renal or extra-renal origin. The latter has its source in a pyelitis, cystitis or urethritis, or in the breaking of an abscess into the urinary tract. The finding of pus corpuscles in the sediment, the absence of albumin in the filtered urine and the lack of urinary changes gives us the true diagnosis. Here need mentioning chyluria, which, be it parasitic or non-parasitic, is always accompanied, and hæmoglobinuria which is usually preceded and followed by albuminuria.

Renal or true albuminuria was formerly considered as a sure symptom of Bright's disease. Since the subject has been studied better, and especially since we have more delicate tests for the

discovery of albumin, opinions have changed. Spiegler with his most delicate re-action which indicates albumin 1.350,000; Hg. Bichl. 8, Ac. Tart. 4, Aqu. Dest. 200, glycerine 20; states that it was difficult for him to find in the higher classes of society a sample of urine entirely free from albumin. Roch's reagent, a saturated solution of sulpho-salicylic acid indicates albumin 1.50000. Such minimal quantities are of no clinical importance. It is called now physiological albuminuria. We find it after hard muscular exercise, heavy meals rich in albumen, cold baths, mental excitement and long continued brain work. Pavy's cyclical albuminuria belongs to this category. This cycle is merely dependent upon external conditions. In the morning, after the night's rest, albumin is less in any case of albuminuria and increases toward evening, after the day's work. Besides the cycle can be broken by muscular exercise, cold baths, etc.

Virchow has mentioned already as far back as 1846, that the urine of new born during the first eight or ten days of life frequently shows albumin, which afterward disappears. Women in labor have usually traces of it.

Nearer to a pathological condition but still without any detectable changes in the kidney, are the following cases of albuminuria:

1. Febrile albuminuria as in diphtheria, the eruptive fevers, typhus, typhoid, tetanus, cerebro-spinal meningitis, rheumatism, influenza.

2. Albuminuria in general non-febrile, morbid conditions in which the composition of the blood is affected as in anæmia (simple and pernicious) leukæmia, pseudo-leukæmia, scorbut, in some cases of icterus and diabetes mellitus.

3. In affections of the nervous system as in epilepsy, delirium tremens, hysteria, cerebral hemorrhage, nervous exhaustion, migraine and Basedow's disease.

Lastly albuminuria is found in certain affections of the intestines as in incarceration and in acute diarrhœas.

The albumin of nephritic urine is the albumin of the blood, serum-albumin (serum) and serum-globulin (paraglobulin). We must remember that other albumins may find access to the urine as nucleo-albumin, the source of which are the nuclei of the cells. After febrile affections there is usually a great desquamation of renal epithelium and disintegration of nuclei from, which we may get a considerable amount of nucleo-albumin in the urine. The same is the case in a catarrhal condition of the bladder and a ves-

ical nucleo-albuminuria has been described. Besides, we find albumose, hemi-albumose or propeptone which was first pointed out by Bence Jones in a case of osteomalacia and since in quite a few other diseases.

The tests commonly used for the detection of albumin in the urine are 1, heat; 2, nitric acid; 3, acetic acid plus ferrocyanide of potassium. All three have to be employed in every case in order to avoid errors. The old teaching, "get acquainted with one test and stick to it," is faulty. Heat coagulates serum-albumin and paraglobulin. Other albumins as albumose, hemi-albumose and nucleo-albumin remain in solution. If we underlay urine with clear nitric acid, all the albumins present will coagulate, forming a white ring at the line of contact. In order to exclude albumose and hemi-albumose, we apply gentle heat. If the ring does not disappear, it can consist of serum and globulin or nucleo-albumin. The latter we exclude by using the third test, acetic acid plus ferrocyanide of potassium, a ten per cent. solution of each. On the addition of a drop or two of acetic acid nucleo-albumin coagulates in the form of a white cloud and can be filtered out. If now by adding a drop or two of a solution of ferrocyanide of potassium we find again a cloudiness, it must be serum-albumin and paraglobulin, the albumose and hemi-albumose having been excluded by application of heat to the nitric acid test.

The most important factor after albumin are casts. They are subdivided into a., blood casts formed by red blood corpuscles held together likely by the fibrin with here and there a leucocyte. They are found in parenchymatous nephritis, but also in renal hemorrhage.

b. Cellular casts composed almost exclusively of renal epithelium which is in all stages of disintegration, from cloudy swelling to fatty degeneration. Their presence indicates that the disease affects the tubules and their absence as in post-scarlatinal nephritis, points toward a glomerular affection only.

c. Granular casts, subdivided into coarse and fine granular, are now considered as cellular casts which have remained longer in the tubules. They are certainly, especially the fine granular, oftenest found in chronic parenchymatous nephritis.

d. Structureless casts, waxy and hyaline. We know little of the formation of the former. They are seldom found and give the reaction of amyloid, but have nothing to do with amyloid infiltration. The hyaline casts are the ones which caused former-

ly, so much trouble among the profession, as some considered them as formed by an exudate, therefore exudative nephritis. The prevailing opinion now is that they are derived from kidney epithelium. They appear in all forms of Bright's disease, and once in a while are even found in apparently normal urine.

I have premised these statements concerning our present knowledge of albuminuria and casts in order to clear the ground for the diagnosis of parenchymatous nephritis.

The twenty-four hours' urine must be conscientiously gathered. The amount is always below the normal, sometimes as low as 500 to 200 cc. For a time we may have even complete anuria. The color is from a light red to a brownish dark hue. The urine is never clear. It is passed turbid and the sediment is heavy. The specific gravity is high 1022-1030. The urinary solids although relatively increased, are below the normal daily amount, as can easily be shown by Haeser's co-efficient: 2.33. For chemical examination the urine must be filtered, and if very concentrated, it is highly advisable to dilute it one-half or two-thirds with distilled or at least filtered water, as then every test shows up better. The three tests will show a considerable amount of albumin. Esbach is likely to indicate $\frac{1}{2}$ to 1 per cent. Esbach's method is only approximative, but close enough for practical purpose.

Microscopy of the sediment demands a fresh sample of urine. The morning's urine, except after a restless night with much tossing, shows the pathological elements the least, and the urine along in the day or towards evening is better, although any sample will usually do.

Under the microscope we find usually red blood corpuscles, a few leucocytes, renal epithelium and casts, hyaline, epithelial and blood casts. In post-scarlatinal nephritis which affects commonly the glomeruli only, we find no epithelium nor epithelial casts.

All the morbid changes of the urine taken together, viz., turbidity, less amount with higher specific gravity than normal, the presence of a rather high per cent. of albumin with red blood corpuscles, epithelial cells and casts in the sediment, are pathognomonic of parenchymatous nephritis, and we can safely say that it is an acute attack. Where the specific gravity sinks closer down to the normal or even becomes normal and the twenty-four hours' amount approaches nearer the amount passed in health during the same time with a scarcity of epithelial but a great

many granular, especially fine granular casts, we have a right to think that the process is chronic. But the two stages cannot be separated by sharp lines, neither by clinician nor microscopist.

Of other morbid conditions renal hemorrhage resembles acute nephritis the closest. In both we have albumin, blood and blood-casts, but in hemorrhage the amount of urine is normal, and in the sediment we find no renal epithelia nor hyaline and epithelial casts. One day's urine may be full of blood, the next day's sample entirely free from it. In chronic congested kidney (*Stauungsniere*) we get less urine than normal, with a higher specific gravity and a small amount of albumin, but no blood, no renal epithelia nor casts. An amyloid kidney gives albuminous urine, but the amount is higher than normal, the specific gravity lower, and the urine is clear, forming little or no sediment. In interstitial nephritis we have also a great deal more urine than normal with a low specific gravity. Albumin may or may not be present, so that we cannot make the diagnosis of contracted kidney (*Schrumpfniere*) from the examination of the urine alone. We have to take into account the cardio-vascular changes.

PROGNOSIS.

BY F. A. PAYNE, M. D.

The prognosis in acute nephritis depends largely upon the character and intensity of the renal inflammation, the primary disease or its causation.

The tendency in acute Bright's is toward recovery. An ordinary exudative inflammation of the kidney following exposure to cold and wet, usually runs a favorable course in a few days to two or three or more weeks, the albuminuria steadily diminishes and finally the casts disappear altogether.

Complete recovery is the rule in these acute cases accompanying diphtheria, typhoid fever, and other infectious fevers.

In simple cases of exudative nephritis the dropsy and albuminuria gradually diminish, the skin improves in color, and the quantity of urine and urea increase, recovery taking place in from three to eight weeks.

Albuminuria may remain for some time after the dropsy has subsided and then disappear, in others, however, in more unfavorable cases, the albuminuria may continue and the inflammation become a chronic parenchymatous nephritis.

In scarlatina nephritis the prognosis is not so good. In these cases the chances of recovery are much less than in those following exposure after alcoholic excesses, the mortality is high amounting to at least 33 per cent. in these cases in young children.

In acute productive or diffuse nephritis many of the cases end unfavorably, either terminating in death in a few days or months, or the acute symptoms subside and a chronic nephritis supervenes. One should be careful, however, in giving too unfavorable a prognosis in these severe cases as great improvement and even recovery are possible. Acute nephritis presents the following severe and dangerous symptoms rendering the prognosis unfavorable: general oedema, dropsical effusion into the serous sacs, ureamia when followed with convulsions* or coma, pneumonitis, plueritis, pericarditis, endocarditis, peritonitis and meningitis. Recovery may take place when there is general dropsy in the absence of ureamia.

The suppression of the urine for more than twenty-four or forty-eight hours is usually fatal. The persistence of dropsy after the first month with intense pallor, and a large amount of albumin in the urine are indications that the nephritis will follow a chronic course.

A fatal termination of this disease is indicated by a very scanty flow of urine, frequent and distressing vomiting, extreme anasarca, severe and persistent headache, convulsions, coma, and occurrence of complications.

Subacute gastritis, hepatic derangement, and oedema glottidis are also complicating conditions which render the prognosis unfavorable.

Pulmonary complications which render the prognosis unfavorable are oedema, pneumonia, and capillary bronchitis. The great danger in pneumonia which complicates acute Bright's disease is the sudden development of pulmonary oedema in portions of the lung not involved by the pneumonia.

In albuminuric retinitis the prognosis is grave, except in cases occurring in pregnancy. The presence of retinal lesions indicates either serious renal disease or general arterio-sclerosis, which is its constant associate.

"A simple nephritis may be cured entirely, or, as very frequently occurs, but partially. In these cases a limited, localized nephritis remains and which is persistent in spite of all treatment. A deformity; not an actual developing disease."

TREATMENT.

BY JOHN PERRIER, M. D.

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Hospitals.

In the treatment of acute nephritis two important points should be kept in view, viz.: the relief of the vascular engorgement of the kidneys, and the elimination of the toxins retained in the blood as a consequence of interference with the renal function. First, the patient should be put to bed between woolen blankets, in order to promote the free action of the skin and induce sweating. To encourage profuse diaphoresis give hot drinks freely; hot lithia waters, hot lemonade, or plain hot water. Liq. ammon. acetat. may also be given if fever be present, with tr. aconit, or verat. virid. The bowels should be moved freely with saline cathartics in hot, concentrated solution, this being kept up daily until improvement in the renal functions occurs. The diet should be light and at first confined to bland nutritious liquids. These measures may be sufficient in mild cases, but where the case is severe or resists the milder methods, it may be necessary to use the hot air bath, which can readily be done with patients in bed by means of a lamp and tin pipe suitably arranged so as to have the hot air pass beneath the bed-clothing.

In those severe cases there is usually nausea and vomiting which may be relieved by hot water in tablespoonful doses frequently repeated, carbonated waters, cracked ice, koumiss, bismuth with small doses of morphia, and sinapisms over the epigastrium. The diet should be extremely simple at first. Equal parts of milk with carbonated water, koumiss, fresh buttermilk, barley water, light broths, but no concentrated meat fluids.

Where the urine is very scant or if suppression exists, hot linseed meal poultices containing a tablespoonful of mustard applied over the loins, and changed at intervals of four hours, are generally successful. I have never found it necessary to use leeches or cupping over the loins, so much recommended formerly.

In the nephritis of scarlatina, where uraemia is threatened or has already occurred, I have found the hot pack most successful in relieving the urgent symptoms and restoring the renal functions. If convulsions occur chloroform may be used to control them after the hot pack has been applied. Hypodermic injections of pilocarpine are recommended by some authors and condemned

by others. Where the heart's action is weak I think it is very dangerous and should not be used, but where the heart is strong and the pulse full its action in causing profuse sweating is valuable. In the uraemia of acute nephritis when all other means fail, resort should be had to that most valuable of remedies,—the subcutaneous injection of normal saline solution. The amount given should be at least one quart, and repeated every six to twelve hours until relief is obtained. A fair-sized aspirating needle may be attached to the tubing of a fountain syringe, and with thorough aseptic precautions the solution injected in the cellular tissue of the breast, axilla or thigh. Its immediate effect is to relieve the vaso-motor constriction, probably by diluting the toxins in the blood, and thereby favoring elimination by the natural channel. High enemata of the same solution may be substituted for the subcutaneous injection, but are not nearly so effective. The most effectual cathartics in uraemia are elaterium or croton oil in $\frac{1}{2}$ drop doses, repeated every hour until the bowels are freely moved. The oil may be combined with small doses of the mild chloride and after being rubbed up with sugar of milk placed upon the patient's tongue even when unconscious. After relief of the urgent symptoms, as the renal secretion increases and improvement follows, little medicine is needed, but the free use of the natural lithia waters should be continued and kept up for some months after convalescence is established. The diet may be gradually increased, considerable amounts of milk being given in the twenty-four hours. Farinaceous foods may be given freely, but no meat should be allowed until albumin has disappeared from the urine, which should be examined at frequent intervals for that purpose. If the appetite remains sluggish small doses of quin. in solut., or any of the other bitter tonics will assist in restoring it. The anaemia which usually accompanies renal affections will require special attention. The patient should be cautioned against exposure to cold, and advised to wear woolen or other warm underclothing to protect against sudden changes of weather. Alcoholic stimulants should not be used during the attack of nephritis, and ought to be strictly forbidden after.

ACUTE HEMORRHAGIC NEPHRITIS IN CHILDREN.

BY EDWARD PERKINS CARTER, M. D.

In addition to the predisposing causes of an acute renal inflammation commonly given, age might well be included as an important element in determining its occurrence.

Bluhm (1), in an analysis of 140 cases of acute nephritis, found that 51.38 per cent. occurred before the age of 30, during that is the first three decades of life, 6.39 per cent. in the first, 9.28 per cent. in the second, and 35.71 per cent. in the third decade. Of the total 140 cases 85, or 67 per cent., were hemorrhagic, occurring chiefly, however, in the adults of this series, while 72 per cent. of the total were directly traceable to some one of the acute infectious diseases.

Bearing in mind the great susceptibility of children to the acute infections, and particularly to the exanthemata, the frequent occurrence in early childhood of acute nephritis, which may or may not be hemorrhagic, is readily understood.

When, however, we consider the comparative frequency of acute renal inflammation at this age, and the various etiological factors, which so largely influence its development, it is in a measure surprising that a true acute hemorrhagic nephritis is present in but a small percentage of all cases of nephritis occurring during the first decade.

It is important that we should exclude all cases of acute nephritis, in which the clinical or post mortem evidence of renal hemorrhage are not distinctly marked, for the presence of red blood corpuscles alone, more or less abundant in the urine, does not always justify the conclusion that we are dealing with hemorrhagic nephritis; while on the other hand severe hemorrhagic nephritis may be present of which the urine gives no clue.

Although in the great majority of instances the poison of scarlatina is the primary factor in the acute nephritis of childhood, the acute hemorrhagic form may also follow as the result of measles, diphtheria, chicken pox, small pox, typhoid, whooping-cough, (tonsillitis), and even mumps; and has further been observed more than once following an attack of purpura. Rarely an acute nephritis not necessarily hemorrhagic has been seen in children as a result of erysipelas, acute rheumatism, eczema, and following the absorption of poisonous products through the skin.

That large group of chemical toxic agents, so frequently in adults the exciting cause of nephritis, is of slight interest to us at this age, except in those rare cases which develop after acute or chronic intestinal disorders, and are unquestionably due to the formation of toxic products in the intestinal tract; and in the still less frequent class, due to the accidental ingestion or overdose of

poisonous substances, as potassium chlorate. That the actual number of cases due to exposure to cold and wet is extremely small is borne out by the figures of Bluhm (*loc cit.*), who found but 2.85 per cent. out of the 140 which could be directly traced to cold in some form or other, and that this is particularly true of children is shown by Dickinson in his article on nephritis (2).

While it would be great folly, to say the least, to permit of unnecessary exposure in any given instance, it is interesting to note the growing tendency of opinion among certain authorities, to minimize the danger arising from exposure, or from catching cold. This point has been particularly emphasized of late in connection with the acute nephritis following scarlatina, which is the sole form described by Hennoch (3) in his work, as being the most frequent and characteristic type of acute nephritis in childhood. Mayr, writing in 1864 (4), said he had seen no untoward results following exposure to the severest weather. While Hennoch (*loc. cit.*, p. 587) does not share the belief still largely held that there is any connection between "catching cold" or suppressed perspiration and the occurrence of a scarlatinal nephritis, almost all his cases having developed in spite of every precaution.

That, however, extreme cold, or extreme heat, may under certain conditions be the direct cause of the nephritis must be admitted, and has been clearly demonstrated by Jacobi. In his article on nephritis of the newly born (5) he says, "renal disorders more or less dangerous, are direct results of sudden changes in the circulation, with or without visible alteration of the blood," and again, "acute nephritis, interstitial, sometimes hemorrhagic, is an occasional unavoidable occurrence in sudden suppression of the cutaneous circulation." This observer has also shown that an acute nephritis, which may be hemorrhagic, may occur in very early life, as a result of certain definite physiological or pathological conditions. His conclusions are as follows: "A predisposition to nephritis in the young is caused by the fragility of the blood vessels in the newly born; by the relative imperviousness of the young renal capillaries compared with the large size of the renal arteries; by the feebleness of the young intestinal muscle which proves insufficient to expel toxic contents; and by the extensiveness and size of the young intestinal

(2) Albutt's *System of Med.*, N. Y., 1897, vol. V., p. 359.

(3) *Vorlesungen über Kinderkrankheiten*, Berlin, 1899.

(4) Hebra's *Diseases of the Skin*, New Sydenham Soc. Transl., vol. I., pp. 207, et seq.

(5) *N. Y. Med. Jour.*, vol. 63, pp. 65, et seq.

blood vessels and lymphatics and the large size of the villi, all of which favor the absorption of toxines."

"From an etiological point of view, nephritis in the newly born may be: Congestive (from feeble circulation, congenital heart disease, asphyxia, or exposure to low temperatures). Obstructive (from the physiological rapid decomposition of the blood in the newly born; the formation of hæmatoidin-bilirubin; jaundice the production of methæmoglobin by chemical poisons, or by excessive heat; or the presence of blood in the uriniferous tubules). Irritative (from the presence of uric-acid infarctions or hæmatoidin infarctions of purpuric or other intestinal hemorrhages, or of microbes and toxines in the numerous eruptive and infectious maladies and in enteritis)."

Finally Holt (6) has established the fact that we may have a so-called acute primary nephritis in childhood. While this group of cases is intensely interesting, it concerns us less than those arising secondarily to some definite infection, though if we admit the existence of a primary nephritis we can not deny the possibility, at least, of a primary acute hemorrhagic nephritis.

Assuming that the degree of renal involvement depends largely upon the virulence of the infective agent, the length of time during which it acts as a local irritant, and upon the resistance of the renal tissues, it is surprising that the occurrence of an acute hemorrhagic nephritis is not more frequent as a complication of scarlet fever; and yet we know that it is seen in but a small number of all the cases of scarlatinal nephritis, and that anatomically it is not in any sense a characteristic lesion of this disease.

Councilman (7) in a recent monograph on acute and sub-acute nephritis, says, "with slight differences in the intensity of the lesions due to conditions which we do not understand, and which may represent increased or diminished local resistance all susceptible tissues will be affected," and further "that in all the more serious lesions of the kidney, we find that in one case the glomeruli are principally affected, while in other cases again there are lesions of the connective tissue, consisting of active cell proliferation."

Based upon a purely anatomical classification, in which there often occur mixed forms, he describes the following forms of acute nephritis, which I quote as being of interest in this connection.

1. Acute degenerative nephritis, occurring chiefly in infectious diseases.

(6) *Archiv. of Paed.*, vol. IV., pp. 1 and 130, and IX., pp. 263, et seq.

(7) *Boston City Hospital Reports*, 8 S., 1897, pp. 31, et seq.

2. Acute glomerular nephritis, occurring chiefly in infectious diseases, notably in acute endocarditis, measles and diphtheria.

3. Acute hemorrhagic nephritis.—The essential change here consisting in hemorrhage into the tissue combined with degeneration of the epithelium. The hemorrhage is chiefly found in the capsules of the glomeruli and in the tubules. The degenerative lesions may be extreme and lead to necrosis and exfoliation. Oedema, hemorrhage, and some cellular infiltration is often found in the inter-tubular tissue. The kidney is enlarged, the surface is dark red showing numerous ecchymoses. On section the cortex is swollen and sprinkled with dots and streaks of ecchymosis.

4. Acute interstitial non-suppurative nephritis, occurring in acute infections, notably in diphtheria and scarlet fever.

In the series of 49 cases considered in this monograph, there were but three of acute hemorrhagic nephritis, two following typhoid fever, and one acute endocarditis with infectious pneumonia, the age of the subjects is not given. Although in a well marked case the diagnosis may be readily made from the examination of the urine, it must be borne in mind that, in rare instances, the urinary findings are notoriously uncertain, and that the only evidence of nephritis may be the presence of albuminuria, together with great diminution in the amount of urine secreted, and that exceptionally, as in the fatal case reported by Litten (8), the urine may be absolutely free from albumin throughout the course of the attack.

Still more extraordinary is the case reported by Hennoch (loc. cit. p. 603) in which death followed an abrupt uraemic attack during convalescence from scarlatina in a boy of 12, the urine having shown no evidence of nephritis up to the day of the fatal attack, the post mortem examination revealing, however, an exquisite hemorrhagic nephritis. As has been pointed out by Forchheimer (9), so far as the existence of hematuria is concerned, it may be present in the non-hemorrhagic and absent in the hemorrhagic form, so that in individual instances it may be impossible to reach definite conclusions as to the character of the changes taking place in the kidneys from an examination of the urine.

There is commonly a marked suppression of the urine, but hemorrhagic nephritis may occur with or without dropsy. One striking symptom may be the extreme waxy whiteness and pallor of the skin, while again it may be no more marked than in the cases uncomplicated by hemorrhages.

(8) *Charité-Annalen*. Jahrg., VII., p. 162.

(9) *Twentieth Century Practice of Med.* N. Y., 1898, vol. XIV., p. 68.

In the two instances cited by Jacobi (loc. cit.) as illustrating the etiological relationship of cold, death followed as a result of a bilateral hemorrhagic nephritis preceded by suppression of urine, due to the plunging of new born infants into cold water.

This observer has also reported three instances of acute hemorrhagic nephritis following an attack of purpura, in children aged 4, 7 and 11 respectively. These patients made a good recovery. He has seen similar but fatal cases in the new born.

Leichtenstern (10) cites a unique case of four recurrent attacks of acute hemorrhagic nephritis in the same individual in which, during the interval, the urine remained free from albumin.

More recently Kerley (11) has reported the unusual occurrence of acute hemorrhagic nephritis complicating mumps in a boy of 4. The attack was characterized by high fever, œdema of the eyelids and marked suppression of the urine; the patient, however, recovered.

The prognosis depends very largely upon the cause of the nephritis, and the conditions under which it develops. Acute hemorrhagic nephritis following scarlatina may prove fatal within the first three days after its development. In the two instances which have come under the writer's observation, one in a child of 4 was followed by recovery, while the second was not clearly recognized as such until the post mortem examination had been made. In every instance the prognosis should be extremely guarded.

The treatment of acute nephritis generally is applicable in these cases. In the instance last cited the writer emphasizes the value of flushing the colon with hot normal saline solution in any case of nephritis with suppression as a means of inducing functional activity in the kidneys.

In conclusion it is extremely difficult to arrive at any tangible explanation for the occurrence of acute hemorrhagic nephritis here, or for its absence there. We know that in every case of hemorrhagic nephritis there is present anatomically more or less degeneration of the renal epithelium, and that the hemorrhage is chiefly found in the capsules of the glomeruli, in the tubules, and beneath the capsule. The fact of its occurrence associated with parenchymatous hemorrhages elsewhere suggests of course, in these cases at least, some close affiliation with purpuric processes generally; but when of infective origin, whether it depends upon some peculiar susceptibility of the blood vessel walls, or is due rather to the character, virulence, or duration of the infecting toxine circulating in the blood, remains an open question.

(10) See Jurgensen. *Acute Exantheme*. Wein, 1896, p. 185.

(11) *Archiv. of Paediat.* XV., p. 108.

ACUTE ALCOHOL NEPHRITIS.

BY H. B. ORMSBY, M. D.

I have been given the subject of acute alcoholic nephritis, but after considering my own personal experience, and that of other physicians, and by a thorough research into the subject, I prefer to call it acute exacerbation of chronic alcoholic nephritis, for I believe that a true acute nephritis following an alcoholic debauch in previously normal kidneys is extremely rare, if ever found, at all.

The chronic alcoholic rarely notices any trouble with his kidneys, and they are often overlooked by the doctor, perhaps on account of the long distance the alcohol must travel before reaching the kidneys, also because nature has various ways of eliminating alcohol other than by the kidneys. Physiological observation has also proven that nature attempts, and does succeed in destroying the identity of alcohol to a great extent before reaching the kidneys, producing gout, and irritating products which injure the kidneys in their attempt at excretion.

Tyson, on Bright's disease, says that alcohol is the most frequent cause of cirrhotic kidney. Christianson that, "Of all predisposing causes none has appeared to play so important a part in granular kidney as intemperance."

Albuminuria, diabetes, Bright's disease, polyurea and other kindred diseases are caused by chronic alcoholism, so that the man who daily imbibes in alcoholic stimulation is constantly weakening his kidneys. Although he may go along for years without any apparent trouble until his physician is called after an over-indulgence in alcohol, the doctor will find his patient suffering from acute nephritis, manifesting itself in pain over the kidneys, irritable bladder, constant desire for urination, urine scanty, high color, perhaps bloody with fibrin, casts and albumin, headache, nausea and vomiting, or perhaps all these symptoms may be increased until the patient gets a complete cessation of the function of the kidneys, followed by uremic coma and death.

I was called at 2 a. m., April 15th, of this year, to see Mr. Chas. W., married, age 32 years, whom I supposed was suffering from delirium tremens. On inquiry I learned that he had been in the habit of taking several drinks of whisky every day, with no apparent discomfort until the present time; he had been on a protracted spree for a week, being in a constant state of intoxication during that time. I gave one-sixth grain apomorphia by hypo-

dermic, which produced active emesis, followed by apparent restful sleep. I then left the patient, saying to the family that I would see him in the morning. When I called at 8 a. m. I found the patient in a state of profound coma, dilated pupils, slow, full pulse, Cheyne-Stokes respiration and a temperature of 101 degrees F. On inquiry I found that he had been asleep since my first call, and that he had passed no urine; on pressure over the kidneys I could elicit some manifestation of pain, but could not awaken him. These symptoms made me suspicious that I was dealing with an acute inflammation of the kidneys. I immediately catheterized him, getting four ounces of very offensive, cloudy urine, which I at once examined, and found loaded with albumin shreds and some blood. I then put him in a hot pack, surrounded by several hot water bottles, and an ordinary table oilcloth over all. This produced active diaphoresis in a short time, and in two hours I saw signs of consciousness. I then administered calomel and digitalis in small doses every hour, also an alkaline diuretic mixture. At the end of four hours he was entirely conscious, and in fourteen hours he had active purgation, a constant desire to urinate with a great deal of pain over the kidneys. The previous treatment was continued, except the hot water pack, with an increase of the amount of urine excreted, albumin decreased, pain lessened, and temperature came down to 98 degrees F., followed in a few days by complete recovery, and ability to return to work.

I think acute alcoholic nephritis itself is very much overlooked by physicians, on account of the many constitutional symptoms of acute alcoholism, such as cerebral congestion, cardiac failure, gastritis, etc. In fact, medical literature is very meagre on the subject. If it were otherwise I am very sure we would not have so many deaths from apparent acute alcoholism, which, in fact, were deaths due to acute nephritis.

If every man who is found unconscious on the street, with the odor of liquor on his breath, could be taken to a hospital (instead of to a jail, and allowed to die, as is true in many cases) and be put into a warm bed, then catheterized, and an examination of his urine be made at once, in many cases it would be found loaded with albumin, urea, blood, casts, uric acid and epithelium, which, if allowed to continue, would soon result in uremic coma and death, where, if active purgation, diuresis, diaphoresis, and active cupping be done, I am sure we would bring that patient back to health which otherwise would have been another death attributed to acute alcoholism, when in fact it was death due to acute exacerbation of chronic alcoholic nephritis.

ACUTE NEPHRITIS FROM CHEMICAL TOXIC AGENTS.

BY JOHN G. SPENZER, M. D., PH. D., F. C. S.

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If, in the words of Senator, "The origin of the disease as far as known is to be referred to such acute alterations in the blood, which in the broadest sense can be considered as poisoning," then it is quite evident that poisoning is the more pronounced, if not the only cause of the disease. We might enumerate briefly: Of the infectious diseases there are none which may not under favorable conditions lead to it. The special bacterium, as well as their toxins and antitoxins have occasioned it.

The real toxic nephritis, however, or such as are produced by soluble poisons of non-bacterial origin, are little if any different from the acute infectious variety. The number of these poisons (and some of which have been tried experimentally in the production of nephritis) is very large, and their action, like in the infectious, is different according to the nature, strength and duration of this action, so that all grades of inflammation, from simple parenchymatous changes, a border or incipient condition, if you please, up to fully developed inflammation with association of interstitial tissue, have been observed.

Many of these poisons have no clinical interest. Such as are normally produced within, and excreted from the body, but under abnormal conditions enter the blood; or such as originate in an abnormal state of the system, or act autochthonous, such as bile, particularly the bile acids, further certain urinary constituents, urotoxins, acetone, etc. Finally numerous substances come into consideration, which in small quantities can be used medicinally, in larger doses, either intentionally or otherwise introduced within the body by real ectogenous poisoning, produce nephritis. Their number is also very large, and consequently toxic nephritis are a multitude.

Practically the following alone are of importance, sulphuric and oxalic acids in large doses; inhalations of ether and chloroform; poisoning with mercury, glycerin, turpentine, copaiba, sandal, cubebs, etc.; the internal administration of creosote, salicylic acid, sulfonal, trional, tetronal, nitrate of potassium and urotropin will probably be in evidence before long; externally applied antiseptics, as carbolic acid and iodoform; or local irritants, such as vesicants or ointments containing croton oil, volatile oil of mustard, tar, naphthol and the like.

Weaker, but still with sufficient analogy, though more limited than the above, are certain pungent condiments and luxuries irritant to the kidney; they are mustard, pepper, horseradish, onions, strong alcoholics, etc. Through their excessive use not only may an inflammatory irritation, but under conditions a pronounced violent inflammation supervene. From the physiologic action of caffeine it might point to the same possibility, through large excesses with tea and coffee.

Such poisons merit special attention, which, through the production of cythæmolytic hæmaglobinuria, may under circumstances produce kidney inflammation, thereby leading to a special division, hæmaglobinuric nephritis, which has already been assigned to another essayist. The best known of such substances is potassium chlorate, but many of the previously mentioned and still infectious substances and toxins, although weaker, have such an action. Whether the loss to the blood corpuscle of the blood coloring always takes place in the general circulation, or in the kidney itself, is still in doubt. Besides potassium chlorate, numerous oxidizing, reducing and indifferent chemicals may occasion this trouble, among these the nitrites of amyl and ethyl, nitroglycerin, dynamite, potassium bichromate, bromin, chlorin, sulphur dioxide, acetylene, hydrogen sulphid, hydrochloric and nitric acid gases belong here.

The intelligent workman or chemist has repeatedly suffered with a renal hyperæmia produced by chlorin, bromin or the nitrites and evidenced by lumbar distress, spontaneous or augmented by pressure over the kidney; together with beef bouillon urine, of reddish color, cloudy, very acid, diminished quantity, abundant sediment, and the microscope tells the story.

ACUTE SYPHILITIC NEPHRITIS WITH REPORT OF TWO CASES.

BY CHARLES J. ALDRICH, M. D.

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It is a well-recognized fact that no organ of the human body is exempt from the ravages of syphilis. We are impressed, however, by the infrequent mention of syphilis of the kidney in the enormous literature of syphilis.

About two years ago I met with a case of acute nephritis immediately following a diffuse syphilitic eruption which had ensued upon an unmistakable initial lesion. In my efforts to obtain some further knowledge of the relation of acute nephritis to secondary syphilis, I was surprised by the very meager amount of recorded observations which I was able to find at that time. This caused me then to believe that syphilitic inflammation of the kidneys was as rare as the paucity of the literature on the subject seemed to indicate.

About twelve months ago I was again reminded of this relation by the occurrence in my practice of a very severe case of nephritis eight weeks after the initial lesion appeared, and coincident with a rather profuse secondary eruption on the skin. At this time better opportunities were at hand for examining the literature of the subject and while a considerable amount of data was obtainable which dealt more or less definitely with it, yet it occurred to the reader that a report of his cases and a short resume of our knowledge of the relation of acute nephritis and syphilis would be worthy of report.

Many authorities writing upon syphilis casually mention the occurrence of nephritis as a complication, but most authors make no reference to it whatever. It may be of interest to note what some of the late writers have to say in regard to its occurrence.

Tyson says that mercury may cause nephritis, but does not mention syphilis.

Osler says: "Acute nephritis is not often associated with syphilis."

Anders says, in speaking of acute nephritis: "Syphilis is rarely a cause."

In the American Text-Book of Genito-Urinary Diseases and Syphilis, there is no mention of it.

R. W. Taylor in his book on Venereal Diseases fails to mention nephritis from a syphilitic infection. Stengel in his Text-Book of Pathology says it may occur.

Bumstead in his work on Venereal Diseases says that he has met with albuminuria in syphilitic cachexia.

Von Zeisel in his book on Syphilis does not mention the occurrence of acute nephritis.

Cornil, Hill, Cooper, Roberts, Morrow and Fuller all mention it, and the latter authors give a careful resume of what is known on the subject.

Did the limitations of this paper admit, it would be interesting to note some of the cases reported by Dieulafoy, Jaccoud, Cornil, Green, Mauriac, Herteloup, Negel, Wagner, Pepper and For-dyce. The last mentioned observer has contributed a very able article on the subject.

Early English writers, among which were Gregory, Wells and Blackall, observed nephritic disturbances during the course of syphilis and attributed them to the action of mercury and not to the disease itself. In 1840 Rayer demonstrated that syphilis was the cause of the nephritis and showed that mercury did not produce the affection. He also states that he had treated a large number of gilders suffering from mercurial trembling without having observed a single case of dropsy or coagulable urine.

In 1885 Guns, a German writer, tried to show that syphilis could not give rise to nephritis but that all such cases were caused by mercury.

Dieulafoy states that he has seen many cases of workmen suffering from professional mercurial intoxication, and yet none of them were albuminuric. He also believes that when mercury has been given that the mercurial intoxication which often ensues is a result of the nephritis, an effect, therefore, not a cause. It is a common observation that nephritics bear mercury very ill, and are often salivated by small doses. It is a good rule to observe the urinary secretion of a syphilitic very critically if he takes on mercurial intoxication readily, since inflamed kidneys do not readily eliminate mercury.

Welander examined the urine in 97 cases of syphilis both before and after treatment with mercury, and found that the elimination of the drug was attended by the presence of casts in the urine. The number of casts increased in proportion to the length of treatment, but after cessation they began to decrease and in four to six weeks had entirely disappeared. He states that no injury to the kidney, either temporary or permanent, was observed. He concludes that mercury must be given cautiously and when nephritis occurs that it is nearly always due to the mercury and not to the syphilis. He also calls attention to the very obvious fact that frequent examinations of the urine are demanded while giving mercury.

I desire to add the following cases to the literature of the subject:

CASE I. R. L., Dane, aged 26 years, street-car conductor, came to me in September, 1898, with a typical macular syphilide.

The distribution was general. The initial lesion had been so slight that he had not even connected the two, but when his attention was called to it, he distinctly remembered a red, hard ulcer on the prepuce which had appeared about 50 days preceding the development of the eruption. There was a small, shotty-feeling lump at the site of the initial lesion, and he had enlargement of both chains of inguinal glands, epitrochlears and postcervical glands.

Associated with the eruption, and the symptom for which he applied for relief more than anything else, was a severe headache. His temperature was 100 degrees under the tongue and he had felt chilly sensations alternating with feverishness. The headache had preceded the eruption about four or five days, and when he came to my office he was in the eighth day of the eruption. His throat was red, but contained no ulcerations. His headache was so severe and continuous that it should have aroused my suspicions. Mercurial ointment was prescribed, a simple bitter tonic, and some acetanilid to relieve his head.

Two days later he appeared at the office complaining bitterly of his headache, and also volunteered the information that he was passing but a small quantity of urine. Examination revealed the fact that he was edematous over the ankles and shins. He was kept in the office long enough to make an examination of a small quantity of urine. It was found to be laden with albumin. The amount of the urine secured at this time was not sufficient to determine the specific gravity. The percentage of the albumin was very high, roughly estimated to be over four per cent.

He was ordered to bed and the next day examination of the urine under the microscope revealed the presence of a large number of epithelial casts, a complete microscopical picture of nephritis. Believing that I had to do with a nephritis which entirely depended upon the syphilitic exanthem, I pushed the mercury, giving him vapor baths, cathartics, a moderate amount of diluents to drink and everything possible to lessen the labor of the kidneys.

Notwithstanding these measures the urine was at one time almost suppressed. The anasarca became the greatest from which I have ever seen a patient recover. His legs were enormous, but after a certain length of time improvement began to manifest itself and he made a complete recovery. On two occasions after he began to improve, he showed signs of ptialism, and the mercury was temporarily suspended or diminished very greatly in amount.

I have examined this patient's urine within the last two months and he appears perfectly well—no albumin in the urine and no formed elements. He has since manifested the presence of the disease on two occasions; once by a periosteal node over the tibia, and at another time by severe nocturnal headache.

CASE II. Mr. S., night watchman, aged 60, suffered from a venereal sore on the prepuce in October, 1899. The sore was a very aggravated one, evidently a mixed infection, which condition was aggravated by his ownership of an extremely long foreskin, which prevented proper treatment. About 46 days following the appearance of the sore, he was attacked by a very profuse macular eruption. From the time of the appearance of the sore he had been taking mercury in the form of gray powder more or less regularly. A short time preceding his macular eruption he was ordered to stop the use of the drug, since the initial lesion began to heal. He was immediately put back upon the gray powder as soon as his eruption appeared, and about 15 days after taking it he appeared at the office, feverish and ill, and with his feet greatly swollen. His eruption had begun to fade, but he told me that from the time of its appearance he had suffered almost constantly from headache.

A specimen of his urine was examined by myself and Dr. F. Y. Allen, and was found to contain a very large per cent. of albumin and a great number of casts, principally of the epithelial variety. We had in this case quite a serious question to decide—whether the nephritis was due to the syphilis or the possibility of its being due to the mercurial treatment.

Going carefully over his history, I could but conclude that the severe headache from which he suffered previous to his second course of the mercury was most likely not due to the eruption, but a real uremic headache, and due to the nephritis which was most probably present at that time. In fact, he thought that his feet were a little swollen at that period, but a man of his age is not unlikely to have a little puffiness of the feet, and therefore this fact did not weigh very heavily in the decision. My experience with the former case inclined me to the belief that it was a syphilitic nephritis, and he was ordered to continue the mercury. In fact, it was increased in dose which should not have been done had there been much reason to believe that his was a mercurial nephritis.

This man, notwithstanding the very large quantity of albumin in the urine, the presence of casts, edema and headaches, in-

sisted that he was not sick enough to go to bed, although his feet were so swollen that he was unable to wear shoes. He declared the vapor baths made him sick and faint, that cathartics gripped him and spoiled his appetite. Thus it was that the contrary old chap had very little treatment except the mercury, under which he made a prompt recovery in a period of less than 30 days, half of which time he continued at his work.

In this case I believe that the early and persistent administration of mercury produced the favorable result. Examination of the urine about three weeks ago revealed neither albumin nor formed elements. He has gained in weight and claims that he is in better health than he has been for a number of years.

Etiology. The etiology resolves itself into the question of the one specific cause.

Pathology. It appears from study of the cases examined post mortem, that the inflammation is of a diffuse parenchymatous type, the tubuli corti being most affected. Henle's epithelium undergoes fatty, granular degeneration. Glomerulitis is usually absent.

Diagnosis. Of course it must be considered that one who sees a large number of patients will see a large number of syphilitics, and it is quite possible that of this number one should have a nephritis absolutely independent of the syphilitic disease.

The effect of mercury may become an important diagnostic. If the nephritis is due to the drug, the process will stop or be benefited by its withdrawal. On the other hand, if the patient is not benefited by its withdrawal, and the quantity of albumin is unusually large and the anasarca very great, both characteristics of syphilitic nephritis, mercury should be pushed.

An important observation was made by Dr. Lueke in his paper on the etiology of acute nephritis. He stated that in acute syphilitic nephritis we should exclude a nephritis due to mercury and a septic nephritis due to the absorption of pus from the specific sores of an extensive pustular syphilide. With the exception of the severe chancre which the old gentleman suffered, there was no chance of a septic nephritis in either of the cases which I have reported.

The question of the cause being syphilitic or mercuric is an important one.

Prognosis. Acute syphilitic nephritis is always serious, however mild the syphilitic infection. Early active treatment of the nephritis renders the prognosis better, but Bouchard and Negel

both compared its relation to syphilis with that of scarletina and gave it a like prognosis. After considerable examination of the literature, I am convinced that but few of these cases die, and base my statements on the little attention given the subject by pathologists when compared with the number of clinical reports of recoveries.

Treatment. The treatment should be that of an acute nephritis from any cause, to which is added a vigorous but judicious course of specific treatment by mercury.

The symposium will be continued in subsequent issues; it includes chronic nephritis (exudative and non-exudative) and the special subjects.

THE TREATMENT OF NAUSEA AND VOMITING FOLLOWING ANAESTHESIA AFTER ABDOMINAL OPERATIONS.

BY HUNTER ROBB, M. D.

Professor Gynecology Western Reserve University.

When vomiting occurs during the semi-unconscious stage the patient's head should be turned on one side and the nurse should have a basin ready to place beneath the patient's chin for the reception of vomited or mucous material so that any soiling of the nightdress or of the bed clothes may be avoided.

During the first six or twelve hours it will be found preferable to give the patient by the mouth nothing except small quantities of toast water or hot water, from one to two teaspoonfuls every twenty minutes. This frequency of administration is generally not only tolerated, but is very comforting to the patient from the fact that it tends to relieve the thirst which is sometimes complained of and at times no further treatment is necessary. When, however, the vomiting is persistent and *aggravated*, it becomes a most troublesome symptom, and one which taxes severely the ingenuity of the surgeon and of the nurse. While the nausea and vomiting continue, the head should be on a level with that of the body or should be only slightly elevated on a small pillow. As a rule the vomiting due to the anaesthetic is over by the end of eighteen or twenty hours, and when it continues after the third day, and particularly when the fluid is expelled without much apparent effort the possibility of the presence of a peritonitis should always be thought of. Persistent nausea can sometimes be relieved by giving two or three tablespoonfuls of very hot water containing 10 grains of bicarbonate of soda. This may be repeated every hour

or so, and a light mustard plaster may be applied over the epigastrium. In a certain number of cases washing out the stomach may be necessary. The vomiting which accompanies a marked septic condition, such as a general or a localized peritonitis, is always hard to control. In the majority of cases this symptom is aggravated instead of being relieved by the administration of drugs especially directed against it, and the treatment of the accompanying constipation or tympany is always of importance and at times most effectual. As a last resort, it may be necessary to give a hypodermic injection of morphine over the epigastrium for the relief of the extreme retching, if there is reason to fear that this distressing condition will otherwise soon exhaust the patient.

Only in exceptional cases in our experience does vomiting occur more frequently than three or four times during the day following the operation, even after severe operative procedures have been carried out; the persistence of this symptom for three or four days, as we have said, is always strongly suggestive of a peritonitis.

Among 114 consecutive abdominal cases analyzed, without a death, in 80 there was a slight amount of nausea and vomiting during the first few hours after the anesthesia. In no case was the condition severe and this symptom generally ceased as soon as the general effects of the anesthesia had worn off. In 34 cases there was no vomiting.

THE SANITARY SCHOOL ROOM.

BY L. K. BAKER, M. D.

AS AFFECTED BY LOCATION.—In selecting a lot the center of population for the ward as well as the rate of increase in school population within the ward should be studied. Also the character of soil, drainage, atmosphere, etc. Particularly in a manufacturing city, such as Cleveland, a location should be sought which is unlikely to be subjected to gaseous atmospheres from manufacturing or other plants situated to the south-southwest or north-northwest of the site.

The question of *street noises* should receive *careful attention*. A side street excluded from the probability of heavy teaming or car lines, is to be desired. In such a location the lot is less liable to be surrounded ultimately by tall buildings. Fortunately more land can be obtained for the same amount of money in such locations than can be purchased on main streets. This gives a larger

play ground surface and allows closer adherence to the rule governing the size of a school lot in relation to the lighting of the school building. This rule, known as Javal's rule, states that *the school building, should be twice as far from the lot line as the height of adjacent buildings.* For example, an ordinary four-story apartment house is approximately 50 feet high. The rule requires that in locations where such buildings are prevalent the lot line should be 100 feet from the school building. This is approximately true of four-story business blocks. Allowing 60 feet as the minimum width for a building the rule requires a lot with a north or south frontage of 260 feet. *Since a properly placed building extends north and south* as to its long axis and, in the case of an 18-room building, is approximately 140 feet long, and allowing that the lot is on a street 40 feet wide, Javal's rule calls for a lot at least 300 feet deep. Looking over the dimensions of the Cleveland school lots, I find that some of them are larger than the rule requires. *Most of them are not.* Many are deep enough, but have a narrow frontage so that when ordinary blocks shall be built upon either side of them the lighting of the buildings will be materially injured.

Not less than 25 of our school yards are situated directly on car lines and on what may properly be termed business property. Street noises interfere materially in many of the rooms in these buildings during several months of the year with the work of instruction. Where it is necessary to place a school building on a main thoroughfare the lot should be of *unusual* depth and the building should be placed well *toward the rear of the lot.*

Having secured a lot of sufficient size to contain a building in which the light of the sky can not be cut off from any pupil by surrounding structures, a building so located as to be largely free from the annoyances of street noises, a building whose long axis runs north and south, thus admitting of an equitable distribution

On the opposite page is given an outline of the floor plan for an 18-room building. Size of lot (according to Javal's rule), east and west, 265 feet; north and south, 330 feet.

The building lines are 100 feet from the lot lines on all sides, thus providing immunity from street noises and for the continuance of sufficient light. The lot should be larger rather than smaller.

The main body of the building is 132x64 feet. This gives a minimum width of hall of 10 feet. But an assembly room approximately 60x90 feet is supposed to compensate for the rather narrow hall.

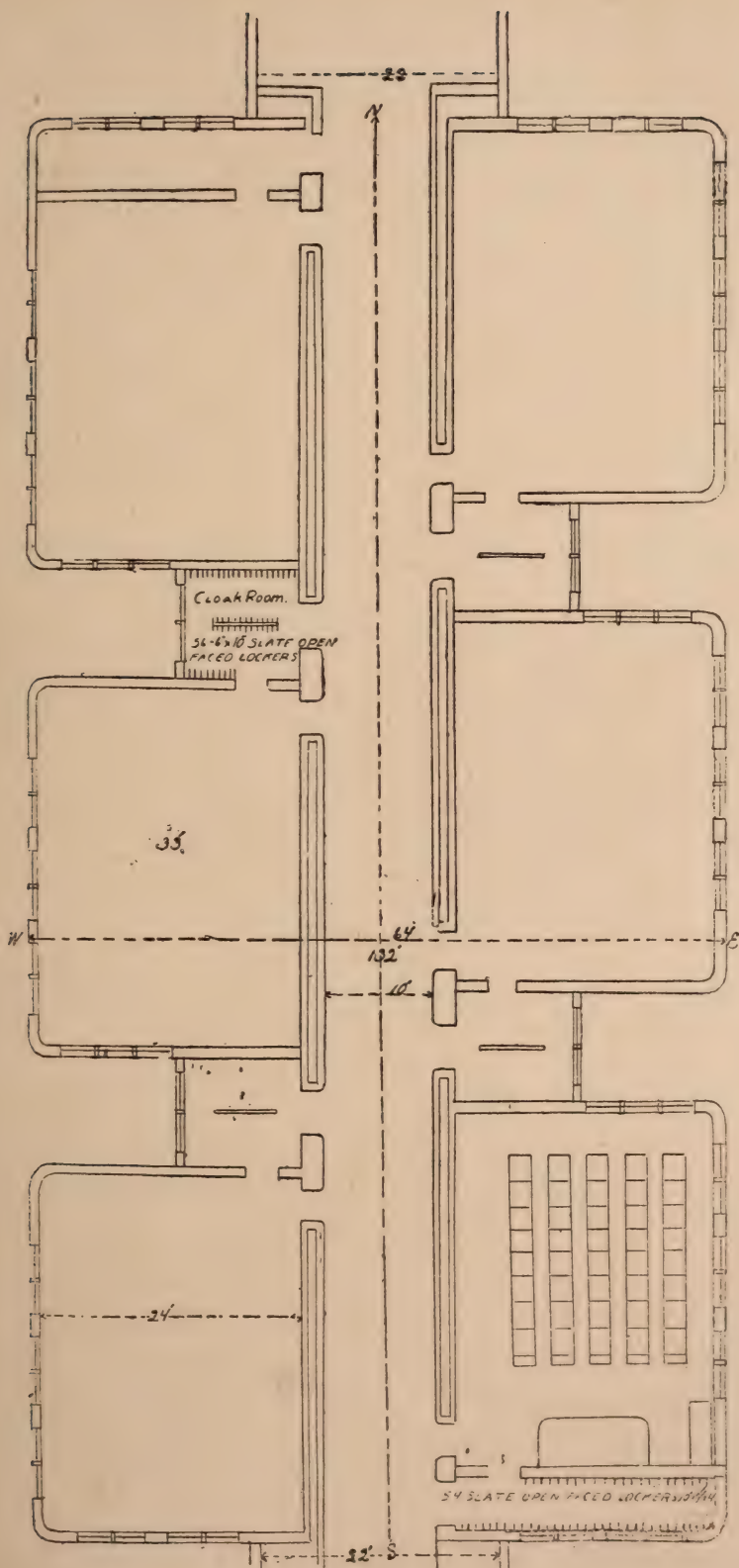
It will be noticed that each room contains plenty of windows on two sides of the room. This feature is found in no building within the city.

The southeast corner room shows the amount and position of the furniture. In every room the seats and desks face the long way of the room.

The seating capacity of this building is approximately 700.

The plan suggests an open faced locker of slate or similar material, so that the clothing of each child may be isolated from that of others, and so that the room may be thoroughly disinfected.

The lighting of the building is materially facilitated through the extensive use of chipped glass.



of sunlight to the rooms, a building with sanitary basement, well-lighted halls, good plumbing, well adjusted system of heating and ventilating, and we have the essential surroundings for a sanitary school room.

THE ROOM.—The conditions which should be present in a sanitary school room have been made the subject of the most searching inquiry and experiment and have been determined with reasonable accuracy so that it is not necessary to commit errors in the construction of school rooms if school officials will avail themselves of the findings of the many scientific men who have devoted much time to the investigation of this subject.

In school house construction the room is the unit and every other feature of the building should be subservient to its utility from both the pedagogical and the sanitary standpoint. And if the room is thoroughly sanitary the pedagogue will soon agree that his work is greatly facilitated thereby. Good sanitation means bodily comfort. Bodily comfort allows the teacher to command prolonged periods of attention. Bodily discomfort takes the attention from school work and expends it in various ways in attempting to secure ease for tired muscles.

GENERAL.—In constructing a sanitary school room many quantities must be definitely considered. Stated roughly these are:

Dimensions—Length, width, height.

Walls—Color, construction, materials.

Contents—Placing of windows, blackboard, furniture, etc. Character of furniture. Size and number of windows. Color and adjustment of shades. Size and materials of blackboards. Cardinal points in seat and desk construction.

FLOORS. CLOAK ROOMS.

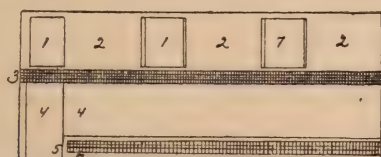
DIMENSIONS.—These have been made the subject of much study and observation by me in what has been written upon the subject and what can be seen in the rooms of city schools. As a result the following dimensions seem to me the most reasonable for use in the Cleveland schools:

Length.—Thirty-three feet is the maximum I can recommend. In a room which is longer than this I find that the pupils occupying the rear seats, even if they have normal sight and hearing, often have great difficulty in seeing ordinary writing on the front blackboard. In this location the words of the teacher are often misunderstood by her pupils. Thus the difficulties of instruction and discipline are greatly increased.

WIDTH.—Several of the best authorities state that the room should not exceed in width twice the height of the window tops above the desk tops. This gives a width of from 21 to 24 feet according to the height of the ceiling.

In a room with a 13 foot 6 inch ceiling with windows extending to the ceiling, 24 feet may well be considered a maximum. Some authorities claim that 21 feet is as wide as is practicable. In the new annex at Lincoln school we have, as regards dimensions, probably the best rooms in the city.

HEIGHT.—Light decreases rapidly as the interior of a room is approached. In very many of our rooms the two or three rows



CUT I.

Inside wall of room with brick partition.

1. Chipped glass.
2. Double brick wall.
3. Register face in front of radiator.
4. Door and blackboard.
5. Register face of cold air outlet.
6. Mop board.

of desk tops nearest the blackboard are very evidently insufficiently lighted much of the time.

Twelve feet may well be considered the minimum height for a school room and when the room is 24 feet wide a height of 13 feet 6 inches is none too great. It has been found that some rooms with a height of 14 feet 9 inches retain good acoustic properties. For purposes of ventilation as well as lighting it is best to have the height of ceiling of at least 13 feet 6 inches.

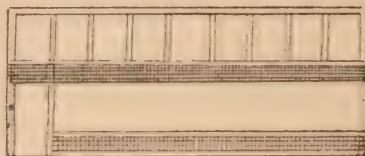
FLOOR SPACE.—A room 24x33 feet can be seated for from 35 to 48 pupils, according to grade, and will allow about 20 square feet to the pupil-average. This is the minimum allowed each pupil by good authority.

CUBIC AIR SPACE.—For the sake of good ventilation the cubic air space should never be less than 240 cubic feet for each pupil. A room 24x33x13½ feet seated for 48 primary pupils allows for each pupil sufficient air space.

WALLS.—*Color.* Very light neutral tints are desirable. Light grey, light bluish-grey, light greenish-grey or light cream tints are all in order. The ceiling tint should be white or nearly

so. Very light green walls with a very light orange ceiling is a restful combination.

Materials. Hard woods or impermeable materials which can be washed are desirable. In future we will see the use of more



CUT II.

Same as cut I. but showing inside wall of room in a building with steel frame.

chipped glass, pressed brick, steel trusses and cement, and less wood in school buildings. As in the case of hospitals the materials will be of such a nature as to facilitate the maintenance of absolute cleanliness.

For outline of construction see cuts I, II, III, IV and V.

TEACHER'S PLATFORM.—This is approximately 5x8 feet x 8 inches, and is placed at the dark end of the room. She should also have a seat near the rear of the room.

The placing of windows, blackboards, furniture, etc., is graphically illustrated in the cuts.

CHARACTER OF WALLS AND FURNITURE.—BLACKBOARDS. In order that they may be well lighted these must be opposite the windows. If they are to be placed on two sides of the room it must be lighted from two sides. Natural slate gives the best surface. The height and width of the board and its height above the floor should be governed by the size of the pupils who are to



CUT III.

Outside wall of room.

1. Showing position of windows.

2. Showing position of transoms.

use it. In advanced grades its upper margin may be 6 to 7 feet, its lower 20 to 30 inches above the floor. Some of the preparations of which boards are made result in a surface which is very

trying on the eyes. Dustless crayons should be supplied in order that the lungs of the children as well as the throat and nose shall not be subject to the constant irritation of mechanical dust.

On the whole, the extensive use of blackboards and slates is of doubtful value.

DOORS.—The main entrance should be at the left of the teacher as indicated in the plan. The position of the cloak room door must vary with the position of the room in the building. As in the case of the windows the transoms should be hinged at the bottom and should be easily lowered.

WINDOWS.—LIGHTING. The light at every desk in the room should be sufficient so that normal eyes can read diamond type at a distance of fourteen inches or see the twenty foot letters on a Snellen's type card, placed anywhere to the right or in front of a pupil at the distance of twenty feet. This requires not only that the window shall be to the floor space as much as 1 to 5, but also



CUT IV.

Section showing transom.

that the windows shall be so placed on two sides of the room as to secure good distribution of light, that there is no interference with light by adjacent buildings and that the shades or other devices for keeping the direct sunlight out of the children's faces be of such character and adjustability as will render it possible to secure plenty of light on bright as well as on very dark days. A great advantage for both lighting and ventilation is obtained if a shallow transom is placed above each window. It should be hinged below and easily lowered from the top inward by means of a transom lift. Opaque glass is suggested as material for the transoms.

SHADES OR BLINDS.—The use of dark shades leads to much eye strain. They should not be tolerated in any building for some teachers will persist in darkening their rooms. The buff shades in common use are fair, but a light grey linen is the best. It permits more diffusion of light and at the same time mitigates the direct sunlight. In some of the south side rooms a distinct advantage would be gained if the shade rollers were placed

near the bottoms of the windows, just high enough to keep the sun off the desks nearest the windows. In this case the shades would pull up instead of down. With good hardware and in rooms with high ceilings such an arrangement would facilitate both lighting and ventilation. For then the shade would not interfere with lowering the window from the top.

A venetian blind, adjustable and with a very wide thin slat, will in all probability supplant shades in all rooms subject to much sunshine.

After a large amount of observation and inquiry in buildings I can find no very good objections to the extensive use of chipped glass in the interior partitions of a school building. It seems to me that 125 square feet of chipped glass can be inserted above the blackboard on the inner side of the room, greatly facilitating the lighting of the entire building. Further, that much of the cloak room partition could



CUT V.

Rear of room showing arrangements of windows and transoms.

1. Chipped glass.

2. Blackboard.

3. Windows and transoms.

well be of this material. Though very limited in amount the chipped glass we have in use certainly assists materially in the lighting of buildings. At times strong sunlight renders it necessary to cut off the direct light from the rooms on two sides of most buildings. At such times light would be received from the other sides of the building, thus rendering the whole interior lighter.

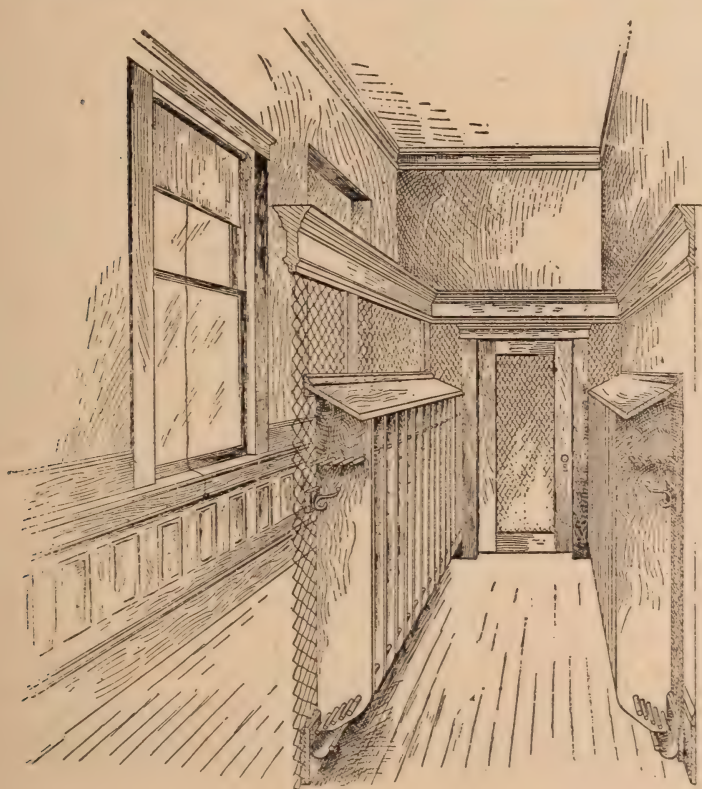
WAINSCOTING OR ENAMELED BRICK.—The wall space beneath the windows and blackboards is usually wainscoted. This answers very well. Enameled or pressed brick is better. In the lower grades plaster or cement surfaces continually show finger marks.

HOT AIR INLETS.—To my mind these should be above the cold air outlets on the inner side of the room and not far from the ceiling. Instead of a quadrilateral they should be in the form of a long, narrow, slit like opening. A register face extending the entire length of the room and of sufficient depth to give 20 square inches of surface, exclusive of register face, for each pupil affords

sufficient inlet for warm air. The cold air outlet should be on the same side of the room and possess approximately one-third more surface.

For Cleveland schools steam heat is, however, preferable. The long radiator should be placed behind the register face as indicated in the cut.

SEATS AND DESKS.—These should be durable and as simple in



CUT VI.

construction as is consistent with thorough adjustability. Cardinal points in construction are:

The *difference* between the seat and desk top should be such that matter on the top of the desk is from 14 to 18 inches from the child's eyes.

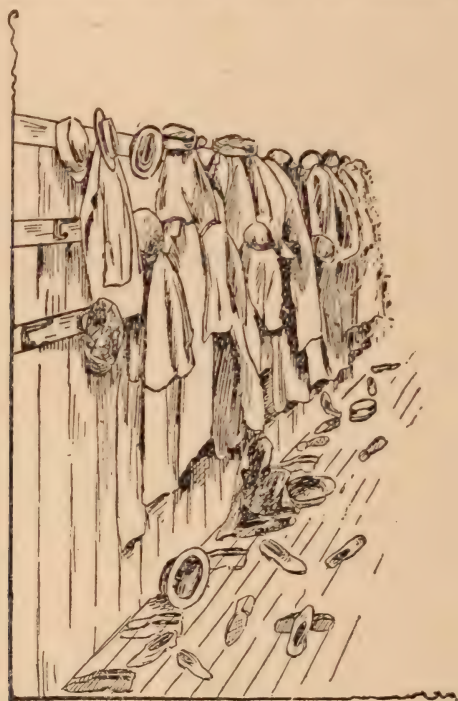
The *distance* between the edge of seat and desk should be minus so that in writing the child may the more easily maintain an upright position.

The *height of seat* must be such that the feet rest squarely upon the floor—i. e. 2-7 of the entire height or the length from the knee to the sole.

The *slope* of the desk should be 1 in 6 in order that the head may be held erect while the eyes are engaged in desk work.

FLOORS.—These should be non-absorbent. Kiln dried hard pine, rock maple or oak, two or three inches wide, imbedded in asphalt, make the best floors.

CLOAK ROOMS.—While not within the school room they are



CUT VII.

so intimately connected with its sanitation that they deserve brief consideration here. See cuts VI and VII.

They should be constructed of such materials as to render it possible to disinfect them easily and frequently. The wraps of each child, while in this room, should not come in contact with the wraps of any other child. To meet these requirements I would suggest that the floor be of concrete and so laid that the room can be flushed. That open faced lockers, constructed of slate or of some other impervious material and approximately 10 inches by

10 inches by 4 feet 6 inches, be provided for each child. It is scarcely necessary to add that in all of the cloak rooms in Cleveland schools the wraps of the children overlap each other and that in no other way is such opportunity afforded for the spread of contagion.

Note.—In an article of this nature it must be taken for granted that the intelligent mind will at once see the reasons for many of the statements. To quote authority and enter into detailed explanations would so lengthen the article that even the long suffering medical man could not finish its perusal. Hence it has been necessary to make it read like the specifications for some building.

In conclusion allow me to suggest that each medical man as he may find time to consider this matter compare the school rooms of his acquaintance with these suggestions.

“The effect upon young physicians practicing outside of hospitals must be not only exasperating, but injurious in many ways. A physician not connected with any hospital or dispensary, who goes to one of these so-called eleemosynary establishments and sees there, as in every day occurrence, many well-dressed women and men waiting amongst paupers for their turn to be examined and treated, must feel that if he is to continue practice he will be driven to either a determined fight against the hospitals and dispensaries, and break up this pauperizing practice, or he must himself become a hospital or dispensary physician and so rebut their influence. * * * It is a very difficult undertaking for one young physician, or even several, to fight a well-established institution. A very common result is, therefore, that the young physician calls together three or four confreres who are similarly situated, they interest some one with more money than judgment in a movement to supply, in a small and modest way, the poor of a certain quarter with free medical treatment, and forsooth, another dispensary or hospital is launched upon a suffering medical world.”—*Dr. W. L. Estis, in National Hospital Record.*

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FEBRUARY, 1901.

No. 4.

Editorial.

FINDING IN THE GENTSCH CASE OVERRULED.

We are pleased to learn that Judge Dissette has overruled the finding of the jury in the case of alleged malpractice against Dr. Gentsch.

In an editorial comment upon the case in the December issue of the GAZETTE appears the following paragraph:

The editor of the GAZETTE was present during the progress of the trial, and it was very evident to him that the case was conducted for the plaintiff with a determination to cover up rather

than to acknowledge the truth, and to appeal to the prejudices of the jury instead of provoking from them an impartial judgment.

We are gratified to find that the judge has also expressed the opinion that "The finding was contrary to both law and evidence." So far so good, but the monstrous injustice of the affair has not yet ended.

Dr. Gentsch, although practically vindicated in the eyes of the law (he needed no vindication from a surgical standpoint), must yet submit to the annoyance and expense of a third trial before a similarly selected jury.

THE CLEVELAND MEDICAL LIBRARY ASSOCIATION.

The reports of the various officers of this association, presented at the annual meeting of the trustees, December 3, 1900, showed that the work of the library was progressing favorably and that its financial condition was satisfactory.

The number of members upon the roll of the association was reported to be 126, a net increase during the year of 6 members.

Three thousand books, 6,766 numbers of journals and 531 pamphlets had been added to the library during the year by donation or purchase, and the total number of books upon the shelves was stated to be 8,678.

Among the additions of the year the largest and most important was the library of the late Dr. Reuben A. Vance, consisting of something more than 2,000 volumes and purchased with funds contributed for this purpose by Drs. Dudley P. Allen and C. A. Hamann.

A "Book and Journal Fund," organized early in the year, had secured for the purchase of new books and journals the very respectable sum of \$640, and of this sum \$546.52 had been expended in the purchase of the latest text-books and works of reference.

Fifty-two domestic and foreign journals had been taken by subscription for the current year, and the exchanges of the *Cleveland Medical Journal* and CLEVELAND MEDICAL GAZETTE had been kindly presented to the library by their respective editors.

A "Committee on Historical Collections and Decoration," also organized during the year, had secured for the library numerous valuable pictures, including those of Hippocrates, John Hunter, Abernethy, Hahnemann and Ambroise Pare, and had acquired the nucleus of a collection of "Medical Antiquaria" and curios, in sev-

eral cases of instruments used half a century ago by the late Dr. Azariah Everett and presented by Dr. P. R. Everett.

The number of visitors to the library registered during the year was reported to be 877, an increase of about 10 per cent. over the registration of the preceding year, and it was estimated that at least 25 per cent. of the ordinary visitors had omitted to register their names in the record book of the association.

The "Bureau of Nurses" had shown increased activity and popularity. Forty-six nurses had been registered upon its books, nearly one hundred applications for nurses had been received, and of these calls seventy-one had been satisfactorily supplied.

The department of stenography and typewriting, under the charge of Mrs. Harding, had been kept very busy during the year, and had contributed no inconsiderable sum to the income of the association.

The report of the Treasurer showed all bills paid to date and a small balance to the credit of current expenses, while the Permanent Fund displayed the comfortable balance of \$7,378.96.

The only indebtedness of the association was a balance of \$7,000 remaining unpaid upon the original mortgage of \$15,000.

In addition to the contributions already noticed, cash donations for the work of the library were announced from Mr. Herman Frasch, Mr. H. A. Bishop, Mr. Stewart Chisholm, Mr. Thos. A. White, Mr. B. Mahler, Mr. M. S. Greenough, Mr. H. M. Hanna, Mr. John De Klyn, Miss Emma Kelly, Mrs. W. R. Warner, Messrs. Cowell & Hubbard, and two others who did not wish to have their names announced.

AN IMPORTANT RULING.

We would direct the attention of our readers to a letter from Dr. C. E. Schilling, of Canton, found under the head of Correspondence. The decision which has been rendered by Judge Ambler in favor of Dr. Schilling is an important one and bears directly upon the personal interests of every physician in Ohio. Physicians, generally, are somewhat careless in the collecting of fees and, no doubt, considerable of this carelessness has been fostered by the law because of the many loop-holes left whereby the debtor could escape his obligation.

Dr. Schilling deserves credit for carrying his case thus far; and should the case be carried to the Circuit Court we shall wait with interest for subsequent decisions.

E. L.

CLEVELAND MEDICAL SOCIETY BANQUET.

The Annual Banquet of the Cleveland Medical Society was held on Friday evening, 18th of January, at The Hollenden. There were about one hundred members present, with a strong probability that many others would have enjoyed the event had their time, for such a recreation, not been unduly encroached upon by the demands of duty in the present epidemic of sickness. Those who were fortunate enough to be present enjoyed themselves to the full limit and, we believe, there was more merriment manifested on this occasion than, at least, at either of the two previous annual events.

The menu was up-to-date, for such an occasion, containing an excellent assortment of the digestible and almost indigestible inventions of the chef and also those refreshing elixirs which act as aids in digesting the almost indigestibles; the Londonderry Lithia Water also acted well.

Dr. P. Maxwell Foshay occupied the toast-master's chair, but instead of the regular toasts the company listened to two addresses, one by Dr. Charles A. L. Reed, of Cincinnati, President of The American Medical Association, who spoke on the "Evolution of Medical Organization in America." Dr. L. B. Tuckerman, of Cleveland, also spoke for a few minutes along the same lines and urged the necessity for organization as a means for more definite influence in medical legislation. Dr. John B. McGee entertained the gathering with a humorous recitation of original composition.

Among those from out of town we noticed the following: Dr. J. D. Bain, of Kenton, President of the Ohio State Medical Society; Dr. J. A. Duncan, of Toledo, Secretary of the Ohio State Medical Society; Dr. N. S. Everhard, of Wadsworth; Dr. E. G. Carpenter, Superintendent of the Columbus State Hospital; Dr. E. G. Myers, of Canton; Dr. J. P. Boyd, of Akron; Dr. C. H. Cushing, of Elyria; Dr. J. H. Jacobson, of Toledo; Dr. H. E. Smead, of Toledo.

E. L.

RESOLUTIONS OF THE MEDICAL FACULTY ON THE
DEATH OF DR. WM. H. NEVISON.

Whereas, death has called Dr. Wm. H. Nevison from among us in his early manhood, therefore, be it resolved: That the faculty of the Medical Department of the Western Reserve University have learned of the untimely death of their associate with

deep sorrow, and feel it as a great personal loss. That in his intense devotion to duty he has sacrificed his comfort, his health and his life.

That one of his strongest and most beautiful characteristics was a winning personality.

That in his death the medical profession has lost a brilliant surgeon, the poor a sincere friend, the students a wise counsellor and helper, the city a good citizen, the Western Reserve University an invaluable teacher, and his friends a friendship beyond price.

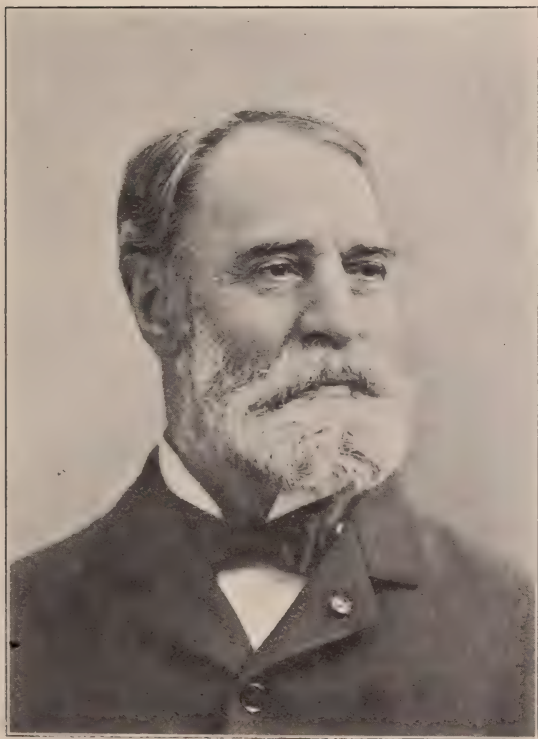
That, as a mark of our respect and affection, these resolutions be spread on our minutes and that the Faculty attend the funeral in a body.

That a copy be sent to the family of the deceased, be furnished the local papers and the medical journals for publication.

Obituary.

DR. HENRY J. HERRICK.

Henry Justus Herrick was born January 20th, 1833, at Aurora, Portage County, Ohio, the third of seven sons. His parents were of New England stock, having emigrated to the Western Reserve in 1820. They soon removed to Twinsburg, Ohio, then a flourishing town and the seat of an Academy of 200 students, where Dr. Herrick, in spite of the arduous labors of the farm, gained a preparation for Williams College. Having graduated from college in 1858 he took a year's course in medicine at the Berkshire Medical College, Pittsfield, Mass. He next spent one year in the study of medicine with the late Dr. M.L. Brooks, and the following one at Rush Medical College, Chicago, where he graduated in 1861. He entered the war in 1862 as Assistant Surgeon of the 17 O. V. I., becoming its surgeon and, later, Division Surgeon with the rank of Major. He was taken prisoner at Chickamauga, confined in Libby prison two months, and after being exchanged and enjoying a short furlough rejoined Sherman's army for its "March to the sea." In 1865 he returned to Cleveland, becoming associated in practice with Dr. M. L. Brooks. Since this time until June of 1899 he remained in the most active practice of medicine. Those who were associated with him know what his untiring labors were and that they could bring nothing but success in its broadest sense, but at the ex-



DR. HENRY J. HERRICK.

pense of an early old age. In 1865-68 he filled the chair of Professor of Obstetrics and the Diseases of Woman and Children in Charity Hospital Medical College, and upon its re-organization as the Medical Department of Wooster University he was chosen to the chair of the Principles of Surgery and at the same time lectured on Hygiene. On the re-organization of Western Reserve University and its union with Wooster Medical School, Dr. Herrick lectured on Pathology and Hygiene, and later on Gynecology.

He was a member of the Cuyahoga County Medical Society, and of the Northeastern Ohio Medical Society, serving a term as president of each, and of the Ohio State Medical Society, serving as its president in 1873-4. He was a member of the American Medical Association, was chairman of the Medical Section, and of the American Public Health Association. He was an elder in the Euclid avenue Presbyterian church for forty years. He served on Governor Foraker's staff as Surgeon-General of Ohio.

Dr. Herrick married, December 8th, 1863, Mary Brooks, daughter of Dr. M. L. Brooks. Their children are Miss Frances H., Dr. Henry J. Jr., Dr. Frederick C., and Leonard B. Herrick.

Among his monographs are those upon "Carcinoma," "The Radical Cure of Hernia," "Some Unsettled Problems as to Contagious Diseases," "House and Home Sanitation."

In May, 1899, Dr. Herrick suffered a partial right hemiplegia from which he regained the use of his side in ten days. However, from this time his health and faculties slowly failed and a renal incompetency gradually developed until January 28th, 1901, when he died of uremic poisoning.

His was a life filled with unselfish labor, generous and kindly actions, such as leave the world better than he found it, and many who mourn his loss as of a father.

DR. WILLIAM H. NEVISON.

On Sunday, January 27th, Dr. William H. Nevison died at Lakeside Hospital, at the age of thirty-six years, surrounded by those who had been associated with him in his professional activity for many years. It seemed a fitting place and a fitting termination to a career spent so largely in assuaging the sufferings of others.

Dr. Nevison was born in Northern Ohio, October 16, 1864. While still a boy he removed to Lawrence, Kas., and it was here

that he graduated at the age of 18 years from the Academic Department of the University of Kansas. Coming to Cleveland he entered the Medical Department of the Western Reserve University, graduating from the same in 1887. From Cleveland he went to New York, where he spent a part of a year in post-graduate work, and upon returning to Cleveland was appointed to the house staff of Charity Hospital. During his service there he made for himself a most enviable reputation, and no one who has ever served in his capacity at Charity Hospital was more highly esteemed by both the Sisters and the Visiting Staff, nor were the services of any house physician ever more acceptable to the sick. On leaving the hospital he went to Europe, where he spent between one and two years in professional study. Returning in 1891 he became the assistant of Dr. Dudley P. Allen, and has since that time been closely associated with him in professional work. Since 1894 he has been a teacher in the Medical Department of Western Reserve University, occupying at the time of his death the position of Assistant Professor of Surgery. As a teacher he was markedly successful and the students esteemed him, not only for the value of his instruction, but also as a personal counselor and friend. On the opening of the new Lakeside Hospital, he was appointed chief of the surgical dispensary and Alternate Surgeon to the house. When serving in the latter capacity the entire responsibility of the surgical service of the institution was under his control and has been conducted with pre-eminent ability, to the satisfaction of the trustees and all of the official household of the institution.

Although a young man, he had gained a most unusual reputation for his ability as a diagnostitian, for skill as an operator and for wisdom as a counselor, and it is not too much to say that he easily took rank as one of the foremost surgeons of the city. His method of work was intense and his application to his professional duties took precedence to everything else. He was absolutely forgetful of himself or of his physical limitations, and with delicate health, such as he has had through all his career, the burden was greater than could properly be borne. Although it had been apparent to his friends that he was far from strong, he would not listen to any suggestion that he should lighten his labor or give to himself prolonged periods of rest until it became evident that tuberculosis had firmly fixed its grasp upon him. Although he took short vacations from time to time and passed a summer abroad, it was not until the fall of 1899 that he was per-



DR. WILLIAM H. NEVISON.

suaded to give up work for a time. He spent the winter of 1899-1900 in California, where he gained materially in flesh and strength, but he returned to Cleveland in the early summer and remained here until November. As the cold weather came on it became evident that he was losing ground, and he again returned to California. He had been there but a short time, however, when it became apparent, even to himself, that but a short period of life remained to him. He decided, therefore, to return to Cleveland that he might pass his last days with his friends. He went directly to Lakeside Hospital where he has gradually failed and where he passed away on Sunday afternoon.

The strongest characteristic of Dr. Nevison's life was his affection for, and his devotion to his friends, and his returning to Cleveland to pass his last days with them was but a continuation of the ruling characteristic of his life. That this trait had begotten for him many close friendships in return was evidenced by the constant attendance given him by the many who had known him, whether his professional associates, his personal intimates, the nurses who had learned to respect him as their chief, or the poor for whom he had done so much.

The funeral services were conducted at the residence of Dr. Dudley P. Allen, and he was taken for burial to Lawrence, Kas., his former home, and where his parents still reside. Although his career was a short one it was filled to overflowing with labor and responsibility. Few, even in lives of much greater length, have done as much for humanity or so greatly endeared themselves to others.

New Books.

A PRACTICAL TREATISE ON DISEASES OF THE SKIN, FOR USE OF STUDENTS AND PRACTITIONERS. By James Nevins Hyde, A.M., M.D., and Frank Hugh Montgomery, M. D. Fifth and Revised Edition, Illustrated with 111 Engravings and 24 Plates in Colors and Monochrome. Lea Brothers & Co., Philadelphia and New York, 1900.

Those of us who have sat on the benches of Rush Medical College and listened to the entertaining talks of Dr. Hyde will remember how interesting he made the subject of skin diseases.

He has succeeded in injecting the same entertaining way of putting things into this work, making it a very readable one.

Five editions of this work have appeared since 1883, affording an opportunity for the authors to revise it each time thoroughly. It is up-to-date and is a work that every physician should read and keep on his shelves for reference.

WM. CLARK.

DISEASES OF THE NOSE AND THROAT. By J. Price-Brown, M. B., L. R. C. P. E., Member of the College of Physicians and Surgeons of Ontario; Laryngologist to the Toronto Western Hospital; Laryngologist to the Protestant Orphans' Home; Fellow of the American Laryngological, Rhinoloical and Otological Society; Member of the British Medical Association, the Pan-American Medical Congress, the Canadian Medical Association, the Ontario Medical Association, etc. Illustrated with 159 engravings, including 6 full-page color-plates and 9 color-cuts in the text, many of them original. $6\frac{1}{4} \times 9\frac{1}{4}$ inches. Pages xvi-470. Extra cloth, \$3.50 net. The F. A. Davis Co., Publishers, 1914-16 Cherry street, Philadelphia.

This volume on diseases of the nose and throat is especially well adapted to those for whom it is intended, the general practitioner and the student who is preparing to enter the profession. The author having devoted twenty years to general practice and ten years to diseases of the nose and throat, knows the general practitioner's wants and has provided a work that fills their requirements. Certain subjects usually considered in works of this kind are omitted, on account, as the author says, "of their being dealt with in works of general medicine, ophthalmology and otology." This may be said of descriptive anatomy of the nose and throat, diseases of frontal sinus, lachrymal canal, asthma and diphtheria.

The substitution of the metric system of weights and measures for the Roman has been strictly adhered to and is in our opinion highly commendable. The work is well illustrated, the colored plates deserving special praise.

DISEASES OF THE EYE. By Kent O. Foltz, M. D., Professor of Ophthalmology in the Eclectic Medical Institute, Cincinnati, O. A manual for the use of students and practitioners; 12mo., 566 pp., 193 illustrations, 5 pp. in colors and chromo-lithographic frontispiece. Cloth, price \$2.50 net. The Scudder Brothers Co., Publishers, 1009 Plum street, Cincinnati, Ohio.

To our knowledge this is the first work on ophthalmology wherein particular attention is given the treatment of diseases of the eye by eclectic medication. The work certainly does credit to the author as a first edition. His method of presenting in parallel columns, for contract, the symptoms of such diseases are iritis, conjunctivitis and acute glaucoma, diseases which, to the uninitiated, appear very much alike, is good and will be appreciated by the student. This method is followed in various places throughout the work where it will aid to a diagnosis.

To those not understanding the principles of eclecticism the general medication will not, in all cases, be fully appreciated.

STRINGTOWN ON THE PIKE. A Tale of Northernmost Kentucky. By John Uri Lloyd, author of "Etidorpha," etc. With illustrations. \$1.50. Dodd, Mead & Co., New York, 1900.

This is a story of Northern Kentucky life at the time of the Civil War. It deals with the peculiar customs and the peculiar people of that section of the country, and with their traditions and folk-lore. The fact that it was written by a member of our profession, Dr. John Uri Lloyd, of Cincinnati, gives it an additional interest to us.

The book is attracting a good deal of attention from all readers and is considered one of the literary successes of the year. There is nothing impossible in the story, all the characters depicted are probabilities in just such a place as we understand Stringtown was. Old Cupe, one of the most interesting characters, was a "fam'ly nigger" with an abundance of "nigger signs" and explanations. The well-known fact that the honey bee does not suck red clover is explained by Cupe as follows:

"When de Lawd make de honey bee an' de bumble bee he make red an' white clovah de same mahn'n. An' de Lawd take de two bees to de fiel' ob clovah an' he sot em on de fence an' 'pared to gib 'em some 'vice. An' when dem bees see de clovah patch an' smell de honey, dey doan wait fo' no moah observashuns, but make a brê'k fo' de blos'm, lebin' de Lawd standin' 'side de grab at dem two bees as dey fly 'way, an' cotch de honey bee; but de bumble bee wah too sharp fo' him, an' git awa', an' he hide in de fence; an' dis actin' up made de Lawd pow'ful cross. An' he clovah patch. Den de Lawd say t' de honey bee, what he hold 'twixt his fingahs: 'Yo' can't git 'way 'til yo' make up yoah min' t' one ob two tings.' De bee ax what dey wah, an' de Lawd spoke de word wid de bark on it:

"'Ef yo' suck red clovah, yo' can't wo'k on Sunday. If yo' wo'k on week-days an' Sundays, too, yo' can't suck red clovah. Yo' kin take yoah ch'ice.'

"An' den de bee, he know de Lawd am in earnest, an he debate de subject obah 'til de Lawd git tired ob waitin', an' say: 'Ef yo' doan make yoah min' up pow'ful quick yo'll git de life squeezed out of yo';' an' he gib dat bee a little squeeze. An' den de honey bee hollah out dat he choose t' wo'k eb'ry day ob de week, Sunday an' all. So de Lawd make him promise not ter suck red clovah blos'm, ef he 'low him t' wo'k on Sunday, an' de honey bee hab nebbah suck a head ob red clovah, nebbah. But de bumble bee, what didn't promise t' de Lawd, suck bof red an' white clovah week-day an' Sunday."

A TEXT-BOOK OF PRACTICAL MEDICINE. By William Gilman Thompson, M. D., Professor of Medicine in the Cornell University Medical College, New York City; Physician to the Presbyterian and Bellevue Hospitals, New York. Illustrated with seventy-nine engravings. Lea Brothers & Co., New York and Philadelphia. 1900.

This work is a most valuable addition to medical literature, and will command high rank in the field of practical medicine. It is divided into nine sections, the diseases being grouped in their respective divisions.

The illustrations are excellent, and for the most part, represent cases seen in the practice of the author. The author has avoided useless and tiresome theory, and has endeavored to set forth clearly only those facts and principles which have received clinical proof.

THE TREATMENT OF FRACTURES.—By W. L. Estes, A. M., M. D., Director and Physician and Surgeon-in-Chief of St. Luke's Hospital, South Bethlehem, Pa. With numerous original illustrations, New York; International Journal of Surgery Co. 1900. Price \$2.00

This little work, although of only two hundred and sixteen pages, takes up and covers the subject of fractures in a thorough, masterful way. Dr. Estes' experience in casualty surgery, embracing a period of fifteen years, has specially fitted him to give to the profession information relative to this subject, which is surely most valuable. The work shows close attention and thorough knowledge, on the part of the author, in its preparation, and, if it be possible to learn by other people's experience, this book should take a conspicuous place among its kind. Originality is one of its most striking features, whilst the absence of all descriptive and illustrative consideration of complicated apparatus should be one of its principal recommendations; on this account the general practitioner will find much to interest him in its perusal. No class of work has been the cause of more anxiety and oftentimes legal complications than the treatment of fractures. A thorough knowledge of the diagnosis and treatment of fractures is one of the requirements that every practitioner should have and this Dr. Estes has tried to impart in his work in the simplest and most practical manner. The illustrations which go so far to elucidate the technic are new and are an agreeable change from the old stereotype reproductions in most text books that we are familiar with. Dr. Estes has devoted much space (and it might be said more) to treatment than most of the larger volumes on this subject.

M. D. STEPP.

PATHOLOGY AND MORBID ANATOMY. By T. Henry Green, M. D., F. R. C. P., Physician and Special Lecturer on Clinical Medicine at Charing Cross Hospital; and Senior Physician to the Hospital for Consumptives and Diseases of the Chest, Brompton. Revised and enlarged by H. Montague Murray, M. D., F. R. C. P., Physician to Out-patients, and Lecturer on Pathology and Morbid Anatomy at Charing Cross Hospital. Ninth American, revised from the ninth English edition, by Walton Martin, Ph. B., M. D., Assistant Demonstrator of Anatomy, College of Physicians and Surgeons, Columbia University. Attending Surgeon to the Out-patient department, Roosevelt Hospital. With 4 colored plates and 339 illustrations. Lea Brothers & Co., Philadelphia and New York. 1900.

Ever since the first edition of Greene's Pathology appeared it has been a favorite with medical students. The fact that it now appears in its ninth edition, after being thoroughly revised, having several new sections and one hundred and eighty new illustrations added, will not detract from its former high standing, but will more than ever meet all the wants of the student of medicine. The American edition has had added to it complete chapters on malaria and on the blood, also a chapter on the preparation and staining of tissues for microscopic study.

Exception might be taken to the arrangement of some of the matter, notably the placing of the chapter on tumors before that dealing with inflammation. The book is well bound and in every respect the publisher's part is good.

PHYSICIAN'S MANUAL OF THERAPUTICS. Referring especially to the products of the Pharmaceutical and Biological Laboratories of Parke, Davis & Co., Detroit, Michigan. 1900.

This is a most complete little manual of 526 pages. Its contents embrace the following: Therapeutic Suggestions, Antidotes to Poisons, Differential Diagnosis of Eruptive Fevers, Equivalents of Weights and Measures, Equivalents of Imperial Measure Units, Approximate Measures, Table of Thermometric Equivalents, Materia Medica.

The printer and book-binder have done their work well, the print being clear and the binding (flexible morocco) being neatly done. Parke, Davis & Co. will send a copy, free of charge, to any physician who may request one.

Herbert S. Stone & Co., Book Publishers, Eldridge Court, Chicago, announce that they have in preparation, and will soon issue, the following important work: Text-Book of Special Sur-

gery. For Practitioners and Students, by Dr. Franz Koenig. Translated from the Seventh German Edition, which has but recently appeared, by Arthur B. Hosmer, M. D., and edited by Christian Fenger, M. D.

It is the authorized translation, and will consist of three large octavo volumes on an especially fine grade of plate paper, and each volume will contain in the neighborhood of 300 illustrations. Any inquiries in regard to price, etc., may be had from the above company.

Society Proceedings.

May L. Bassett, Medical Reporter.

CUYAHOGA COUNTY MEDICAL SOCIETY, DEC. 6, 1900.

The regular meeting of the Cuyahoga County Medical Society was held in the Cleveland Medical Library building on Thursday evening, December 6, 1900.

The meeting opened with the president, Dr. Aldrich, in the chair. The minutes of the last two meetings were read and approved, and the following named physicians were elected to active membership: G. W. Moorhouse, M. D.; E. P. Carter, M. D.; J. H. Belt, M. D., and P. S. Smigel, M. D.

The regular program of the evening was then called.

Dr. H. H. Powell, whose name was upon the program for a paper upon "Acute Nephritis and Pregnancy," stated that he considered the ground so thoroughly covered by the preceding papers that it was unnecessary for him to present the subject.

Dr. F. C. Herrick—"The Pathology of Chronic Exudative Nephritis."

Dr. O. B. Campbell—"Prognosis of Chronic Exudative Nephritis."

Dr. A. Maschke—"Amyloid Kidney."

DISCUSSION.

Dr. Walter Stern: I wish to say a word in regard to the subject of Amyloid Kidney. I have also seen the statement of Prof. Leube, that certain parts of the world are more free from amyloid disease than others, but I do not believe he is correct in his statement, that this is due to some climatic conditions. In his own city of Wurzburg, Prof. Hoffa has one of the largest clinics for bone diseases in Europe; and, although these cases are gathered from the different sections of Europe, most, however, from a radius of from one to five hundred miles, Leube states, there

was much less amyloid there than in other parts of Europe. As an explanation for this Hoffa brings forward the fact that most of his cases are children who are not addicted, of course, to the use of alcohol and are therefore not prone to have a chronic nephritis, as are the adults in the various large clinics. He therefore agrees with Albrecht in that amyloid kidney usually develops in a person who has at some time or other suffered from chronic disease of the kidney in conjunction with a chronic inflammatory or suppurative process.

Dr. Lauder: With regard to the prognosis in Chronic Nephritis I would like to say a word. In this disease, if the retina becomes implicated (albuminuric retinitis), we are fairly safe in making a prognosis of death within one year or, at most, two years after that time; statistics vary somewhat on this point, some authorities making the one year limit in from 70 per cent. to 80 per cent., and one authority in 100 per cent.

Dr. Aldrich: If I may be permitted a word upon the topic, there is one form of retinitis from inflammation of the kidneys wherein this rule of prognosis does not hold good, and that is in cases of nephritis in pregnancy. I know of a lady here in the city who became blind and has been so for a matter of ten or twelve years, from retinitis during the nephritis of pregnancy, and it is true that they will sometimes lose sight, pass through a confinement or miscarriage and remain entirely blind, but recover from the kidney disease. It is rather hard to account for considering the extremely bad prognostic which the doctor has mentioned.

Since the eye has been mentioned, it might be well to note that the diagnosis of brain tumor is not very uncommon in a case of nephritis. I recall a case where I made the error and another where I nearly repeated it. In one case it was a typical choked disk, headache and vomiting and no evidences in the urine of nephritis. The case went on to death, when post mortem showed diseased kidneys and no brain lesion, but the ordinary wet brain of those dying from uremic coma. Profiting by my first error, in the second case the kidneys were carefully studied and a nephritis demonstrated, which was confirmed on autopsy.

Dr. Lauder: My remarks applied entirely to the retinitis of chronic nephritis. Where the retina has been affected in the acute nephritis of pregnancy I have seen patients alive and well twenty years after the attack.

Dr. Aldrich: Retinitis does occur in acute nephritis, does it not?

Dr. Lauder: Yes, but the prognosis is not so grave.

Dr. Stern: I would like to ask Dr. Herrick whether we ever get a pure parenchymatous or a pure interstitial form in chronic nephritis. Are they not generally mixed forms, with the one or other type predominating?

Dr. Quirk: I would like to ask Dr. Lauder to tell us whether he can distinguish between acute and chronic nephritis by examination of the retina and, if so, would he kindly describe to us some of the differences?

Dr. Lauder: The changes we find in the retina of albuminuric retinitis are due to a fatty degeneration of the inner extremities of the radiary (Muller's) fibres. It is this which causes the well-known star figure which we see with the ophthalmoscope around the macula. The change is the same in both acute and chronic nephritis, so that a differential diagnosis between the two is not possible with the ophthalmoscope.

Dr. Herrick: Dr. Stern has asked whether or not we ever have a typical parenchymatous nephritis, limited to the parenchyma alone. I think not. We have degeneration of the lining cells of the tubules, and we have an increase of interstitial tissue, but we never have one without the other.

CUYAHOGA COUNTY MEDICAL SOCIETY, DEC. 20, 1900.

The adjourned meeting of the Cuyahoga County Medical Society was held at the Medical Library on Thursday evening, December 20. The meeting opened with the vice-president, Dr. Tuckerman, in the chair. In the absence of the secretary, Dr. Oswald was elected secretary *pro tem*. The regular program of the evening was called "Chronic Nephritis (Non-Exudative)."

Dr. W. T. Howard—"The Pathology of Chronic Nephritis."

Dr. S. Bernstein—"The Etiology of Chronic Nephritis."

In the absence of Dr. Bernstein, his paper was read by Dr. Stern.

Dr. Howard also presented the heart, spleen and kidneys of a case of general arterio-sclerosis which had just come to autopsy. The patient, a man aged 39 years, died at the City Hospital, service of Dr. Hoover, with the clinical diagnosis, chronic interstitial nephritis and acute croupous pneumonia of the upper lobe of the right lung. The heart, which was globular in shape, free from

pericardial and endocardial lesions, and showing general hypertrophy and dilatation, weighing 670 grammes, was typical of general or diffuse arterio-sclerosis. In the absence of pericardial adhesions and valvular endocarditis, the only other disease known which calls for such a high grade of cardiac hypertrophy is marked general arterial hypoplasia. This is rare, while arterio-sclerosis is common. The diagnosis of arterio-sclerosis in this case can be made then upon the heart alone.

If I am correctly informed, the clinical symptoms and urinary analysis pointed to the diagnosis of typical chronic interstitial nephritis with atrophy and granular cortices. On the contrary, at autopsy we find that the kidneys are but slightly smaller than normal, with perfectly smooth cortices! They are, however, tougher than ordinary. Histological examination would show chronic glomerulo-nephritis with thickening and hyaline degeneration of the small arteries, without much fibrous tissue increase. The renal changes here are simply a part of the change going on in the vessels of various organs. The individual died on account of arterial rather than of the renal lesions. In these cases the kidneys may not show any lesions at all. This case emphasizes my previous remark, that the size of the heart is the most important point in the differential diagnosis between arterio-sclerosis and simple chronic nephritis—the former causing marked and the latter only moderate heart hypertrophy.

DISCUSSION.

Dr. N. C. Yarian: I do not recall in Dr. McGee's paper that he spoke of the use of lithium salts in the treatment of nephritis. I would like to ask the Doctor what his opinion is with regard to them.

Dr. McGee: With regard to lithium salts in the treatment of nephritis, I presume that they do have some action as alkaline diuretics, but I think the larger amount of value is due to the diluent in which it is given. I have seen nothing better than potassium or lithium, and I would use them interchangeably, although I have found the lactate of strontium quite an efficient agent in these cases.

Dr. Ormsby: In regard to the specimen presented with Dr. Howard's paper, I would like to ask the Doctor if the diffuse arterial-sclerosis had been recognized before autopsy, and if the cardiac hypertrophy was also recognized, or whether it was diagnosed simple cardiac dilatation.

Dr. Howard: There have been a number of points of great interest to me in this topic. It has always been one that has interested me a great deal. A number of things occurred to me during the reading of the papers, but I will mention only one or two. Dr. McGee, in speaking of treatment, mentioned tincture of chloride of iron. Some years ago Weir-Mitchell recommended its use in teaspoonful doses for reducing vascular tension. Osler also speaks of it. I would like to ask if Dr. McGee has ever used it for this purpose?

Dr. McGee: No, I have not used the tincture of chloride of iron in large doses. In small doses, however, I have used it almost as a routine, and, although one of our oldest preparations, generally find benefit to follow in these cases. The only objection I see to the large doses of a teaspoonful would be the probable irritating action on the stomach.

Dr. Howard: Dr. Stern says that Lancereaux attributed chronic nephritis to urethral stricture and chronic cystitis. This is quite true, and I have seen such cases. Chronic pyosalpinx and pelvic abscess appear to cause chronic interstitial nephritis. I have noted marked chronic nephritis at autopsy in a number of comparatively young women, with chronic pelvic inflammation. This point should be borne in mind in operating on such cases.

It is of interest in this connection to recall that Morse was able to produce chronic interstitial nephritis in rabbits by inoculating them with repeated sublethal doses of the staphylococcus aureus. I am in the habit of seeing cases of chronic nephritis in quite a different light from that in which you see them as general practitioners. *For instance, a surgeon operates on a patient, who dies without recognizable reason, and in a considerable number of these cases at autopsy one finds a greater or less degree of chronic nephritis. I believe that people often die of a nephritis which is unrecognized or not recognizable by the ordinary methods of examination; often perhaps in such small degree that it does not cause a well-marked hypertrophy of the heart. I am certain that many such cases occur. I would like to have Dr. Bunts speak upon this point, for I should like to know what his experience has been.

Another thing about these cases which strikes me as remarkable is the comparative immunity of the liver. In my experience it suffers least of all the large viscera. There is hardly any change in it in many cases of arterio-sclerosis.

Another thing I wish to call attention to is that in arterial sclerosis dropsy is an uncommon symptom. These individuals only have anasarca in the last stages. The large proportion of them die suddenly without developing edema, and this is quite different from what obtains in nephritis without arterial lesions.

Correspondence.

Canton, Ohio, January 11th, 1901.

Editors Cleveland Medical Gazette:

Dear Doctors:—In the case of Dr. C. E. Schilling vs. Samuel Hine, for recovery for medical services rendered, Judge Ambler, of the Court of Common Pleas, Stark county, Ohio, held that a physician's claim for attendance was a claim for "necessaries" under the attachment law as amended by the General Assembly April 26th, 1898 (73 Ohio Laws, page 319).

The above will likely explain itself. Judgment was confessed in Justice Court, but exception taken on the ground that physicians' services were not necessities under the meaning of the law. This decision makes all wage earners liable for services, rendered by physicians, to themselves or families. This is the first time the question has been raised, and the physicians in our city are pleased with the result. It will likely be carried to the Circuit Court, if so I will notify you of the result if you care to publish it in the GAZETTE. The decision is of so much importance to the physicians of Ohio that I think it should go before them. The case was heard January 9th, 1901.

Yours very truly,

C. E. SCHILLING.

218 East Forty-sixth Street,
New York City, Jan. 7, 1901.

To the Editor.

DEAR SIR: I intend to publish a second paper on the use of the suprarenal capsule in organic heart disease. Will you kindly ask the readers of your journal to send me the reports of their cases as follows:

I. The condition of the heart and pulse, and pulse rate.

II. The effect on the heart and pulse and pulse rate within ten minutes after the suprarenal powder, three grains, is chewed and swallowed without water, by the patient.

Yours truly, SAMUEL FLOERSHEIM, M. D.

Notes and Comments.

Dr. J. P. Boyd, of Akron, attended the banquet.

Dr. E. G. Myers, of Canton, attended the banquet.

Dr. H. E. Smead, of Toledo, attended the banquet.

Dr. C. H. Cushing, of Elyria, attended the banquet.

Dr. J. H. Jacobson, of Toledo, attended the banquet.

Dr. N. S. Everhard, of Wadsworth, attended the banquet.

Dr. John A. Gilbert, 116 Clinton street, died on 23rd January, after a long illness.

Dr. G. R. Feil, was confined to his home through illness for a few weeks during January.

Dr. Charles B. Parker was indisposed for a few days during the latter part of January.

Dr. E. G. Carpenter, Superintendent of the Columbus State Hospital, attended the banquet.

Dr. J. A. Duncan, of Toledo, Secretary of the Ohio State Medical Society, attended the banquet.

Dr. John G. Spenzer was confined to his home the latter part of January, being indisposed.

Dr. F. D. Bain, of Kenton, President of the Ohio State Medical Society, attended the banquet of C. M. S.

Dr. and Mrs. I. Friedman rejoice in the possession of a girl baby which is, the Dr. assures us, "A real nice little one."

Dr. Calvin Shaw, corner Willson and Payne, was elected president of the Cleveland Canadian Association on January 14.

Dr. Fred J. Schmoldt, corner Superior and Willson, is to be married to Miss Rose Shelby, a Cleveland lady, in the near future.

Dr. B. F. Hambleton, House Surgeon until the 1st of January at the Cleveland General Hospital, has located at 1273 Euclid avenue.

Dr. Musser, the well known author of a text-book on Medical Diagnosis, is to address the Quarterly meeting of the Cleveland Medical Society in March.

Dr. Charles A. L. Reed, of Cincinnati, President of the American Medical Association, attended the banquet of the Cleveland Medical Society on the 18th January.

Dr. Edward Lauder has been appointed consulting oculist to the Brotherhood of Railroad Trainmen. The operations of this Brotherhood embrace all of the United States and Canada.

The Cleveland Medical Society, held their annual meeting on January 11, when officers for the ensuing year were elected. The officers are as follows: President, Dr. Charles F. Hoover; first vice-president, Dr. H. W. Rogers; second vice-president, Dr. Robert Pollock; secretary, Dr. John N. Lenker; treasurer, Dr. John M. Ingersoll; censors, Drs. H. C. Ballard, C. A. Hamann, D. S. Hanson, F. C. Herrick, J. J. Thomas; trustees, Drs. J. H. Belt, O. B. Campbell, W. A. Knowlton.

Buffalo is very busy in getting ready for the millions of people who are expected to attend the Pan-American Exposition in that city next summer. The people of Buffalo are pursuing a sensible policy in respect to preparation for the accommodation of visitors. Not a great deal has been said about the building of additional hotels of an expensive character for Buffalo for the Exposition. There is good reason for this. Some additional hotels are being constructed, it is true, but in the main the people of Buffalo expect to make ready for the entertainment of their guests by expansion, alteration and improvement of existing structures rather than the building of new ones, and by the accommodation of visitors in private homes so that after the Exposition is over there will not be a large amount of property on hand which can be put to no useful purpose. A great many business blocks, apartment houses, etc., are being fitted up for hotels for the Exposition season, and these, when the Exposition is over, can be turned back to their original use and they will not be losses as investments.

It is estimated that with the hotel buildings now in existence and those being constructed, the hotel accommodations of Buffalo are about 20,000. It is probable that this will be added to by 10,000 before May 1, 1901. The Statler Hotel adjoining the Exposition grounds on the south is now under construction. It is a temporary structure in staff to harmonize with the Exposition buildings and will afford accommodations for 5,000. The Esenwein, another temporary hotel near the Exposition site, is designed to accommodate 3,500. The Iroquois and Mansion House, permanent hotels in the business district, of Buffalo will accommo-

date 1,500 each. The Tifft House, also in the business portion, will house 1,000 and the Genesee and Broezel 800, and smaller hotels will increase the accommodation of the hotels of the business portion of the city. Near the beautiful park, called the Front, is the Hotel Niagara, overlooking the Niagara river, which for several years has been unoccupied, but it is being refitted and improved at an expense of over \$25,000 and will be reopened with an accommodation of about 800. The Lenox, a fashionable apartment house on North street, in the most desirable residence section, is being reconstructed for use as a hotel during the Exposition season. The Markeen, the Buckingham and Marlborough and many other structures now used for apartment house purposes, will be turned into hotels for the Exposition season. In some cases the proprietors of these apartment houses have made arrangements to have their tenants move out in the spring, spend the summer in the country and return to their apartments after the Exposition. This will make an admirable arrangement as it will leave fewer vacant premises on the hands of landlords when the Exposition crowds have ceased to come. The Columbia National Bank building, the Law Exchange and other first-class business structures in the business district will be used for temporary hotels. In short, there need be no fear that Buffalo will not have adequate hotel accommodations for Exposition visitors desiring to lodge in hotels.

But the experience of past expositions shows that a very large proportion of those attending expositions prefer to secure accommodation in boarding houses or private homes rather than in hotels, and therefore the people of Buffalo are preparing to open their homes to Pan-American guests upon a generous plan. All over the city these private homes and small boarding houses are being made ready for the reception of guests by slight but adequate changes in the interior arrangements. In this way the accommodations can be extended indefinitely and excellent accommodations offered for the crowds who are sure to come and who will make the exposition the great success it is bound to be with such an attendance.

In France it is proposed to tax all celibates above certain age, and all childless couples who have been married more than five years. The object is to promote an increased birth rate. It will fail, however, for it would not be possible to impose a tax sufficiently high to make the avoidance of the tax desirable from a simply financial standpoint.

Triplets Born in Ambulance. Kate Lonagan, of New York, sick and destitute at her home, was being taken in an ambulance to Flower hospital when she gave birth to triplets, all boys. The mother and triplets are in the hospital. All are doing well.

Plenty of restaurants will be found at the Pan-American Exposition at Buffalo next summer, and they will be of various classes, all giving good service of their kind. The management has determined that no cause for complaint should exist and there is every assurance that visitors can obtain meals to suit their tastes at reasonable prices upon the grounds. The two beautiful buildings which form the entrances to the Midway and the Stadium and which front upon opposite sides of the Plaza will be used for restaurants. Pabst of Milwaukee has the concession for a restaurant on the Midway, which will be housed in a building of fine architecture, and will be one of the very best establishments of its kind. There will be more restaurants in the Electric Tower and at various other points on the grounds. Light refreshments will be served in the pergolas of the Esplanade. At the different restaurants the service will be varied, so as to meet the demands of all classes. There will be a la carte service and meals at fixed prices. There will be lunch counters where clean but cheap food can be obtained and restaurants where the service will be equal to that of a first-class hotel, with prices as reasonable as would be found at such hotels. In the German village, called Old Nuremburg, a specialty will be made of serving dishes in the German style, and in the Mexican and Italian restaurants meals can be obtained served according to customs of their respective nations. There will be a New England kitchen and probably a Maryland kitchen, where sea food from the eastern shore of that state will be a specialty. The Pan-American visitor will not be perplexed about where to get good meals.

The German Bill to Regulate the Sale of Patent and Proprietary Medicine or Cures, which was introduced by Mr. German into the Ontario Legislature during its last session (*Dominion Medical Monthly*, November), contains some very excellent recommendations, many of which might be copied by other legislatures with advantage; among others, the following:

"II. No person shall advertise any medicine, in respect of which a license has been granted, by any advertisement—

"(1) Which consists in whole or in part of any surgical picture or representation;

"(2) Which is of a nature to suggest the means of committing any crime;

"(3) Which is offensive in its language or suggestion;

"(4) Which is calculated to hold out false hopes of the prevention, alleviation or cure of any disorder of the functions of the body;

"(5) Which is, having regard to the formula or prescription filed, fraudulent or misleading in its statement of the curative properties of the medicine."

Surgeons, Dentists and Veterinarians for the Army. In the new Army Bill discussion amendments were passed bearing on the appointment of fifty volunteer surgeons, ranking as major, and of fifty assistant surgeons with rank of captain; thirty dental surgeons, of whom three should be chief dental surgeons, and a corps of veterinary surgeons.

Koplik's Spots in the Diagnosis of Measles. Dr. Jose L. Hirsh (*Phila. Med. Jour.*, August 25, 1900,) after much investigation, concludes:

1. An eruption limited to the buccal and labial mucous membranes, and characterized by the presence of an irregular red spot, with a bluish-white center, is always present in beginning measles.

2. These spots are present from twelve hours to five days before the cutaneous outbreak.

3. The number of these spots bears no relation to the severity of the attack.

4. These spots will be found in no other condition of health or disease.—*Virginia Med. Semi-Monthly*.

Simple Conjunctivitis. Examine first, says De Schweinitz, for foreign bodies or misplaced cilia. In the earlier stages cold compresses are advantageous, later hot water is preferable. The eye should be frequently washed with water and Castile soap and boric acid, gram 0.7 to grams 30.0 of water (gr. x-z j) dropped in. When the discharge becomes mucous or mucopurulent, paint with solution of silver nitrate, gram 0.12-0.3 to grams 30.0 (gr. ij-v to z j), and use stronger boric acid with sodium chloride added. In severe types wash eyes with bichloride of mercury, gram 0.045 to grams 500.0 (gr. $\frac{3}{4}$ to O j). Any thickening of the retrotarsal folds may be touched with alum or glycerite of tannin. Atropine is not necessary unless there is a corneal ulcer or other complications. Poultices should never be used. The eyes may be protected with smoked glasses.—*Diseases of the Eye*.

No exposition of the past possessed such elaborate sculptural adornment as will be a leading characteristic of the Pan-American Exposition. The buildings and grounds of the exposition at Buffalo will be embellished profusely with most artistic creations from the hands of some thirty-five of the best-known sculptors on the American continent. There will be some 125 original groups of statuary, and these figures will be used especially in the adornment of the Triumphal Bridge, forming the grand entrance to the main Court of the Exposition, from the south, the fountains of the Esplanade, the Court of Fountains, the Electric Tower and the Plaza. The Temple of Music, at the corner of the Esplanade and Court of Fountains, will be one of the most profusely adorned buildings in this respect. Isidore Konti is modeling the sculpture for this building. Two typical subjects are presented here, to illustrate Mr. Konti's work, "Heroic Music" and "Figures of Children with Musical Instruments." The group entitled "Heroic Music" will be one of four large groups to be placed over the entrances to the Temple of Music. Some of the finest conceptions of the sculptors engaged in the work for the Pan-American Exposition will be seen in the Esplanade. At the western end of the Esplanade will be fountains having sculpture illustrating the meaning and purpose of the buildings in that portion of the grounds devoted to Mine and Mining, Horticulture, etc. The "Fountain of Nature" will be the main fountain in this group. Other groups will illustrate such subjects as "Mineral Wealth," "Floral" and "Animal Wealth." One of the views shown is a photograph of the group entitled "Mineral Wealth," and is a striking creation by Mr. Charles H. Niehaus. Another figure shown is that of a "Torch Bearer," and is a portion of the work done by Mr. Philip Martiny for niches in the Electric Tower. Still another masterful conception shown is that of "The Horse Trainer" by Frederic G. Roth. Another view shows figures of "Buffaloes Resting" and is also by Mr. Roth. These two subjects are for the ornamentation of the entrance to the Live Stock Division of the Exposition.

Warts and Moles. W. C. Abbott (Alk. Clinic) suggests the use of ethylate of sodium for the removal of these unsightly little tumors. He applies it in the following manner: The growth to be treated should be walled in with a bit of wax or vaseline or mutton tallow, whatever of this nature is handy, and then a drop of the solution should be placed on its very tip. After two or three minutes any remaining portion should be absorbed off with

a blotter. A caustic effect occurs which kills quite deeply, forming a dark scab which peels off and leaves the parts normal. If the growth is quite thick, one or two subsequent treatments may be required; but wait and see what one does before applying another.

Boston's long-established weekly magazine, *The Living Age*, opens its two hundred and twenty-eighth volume with the number which bears date on the first Saturday of January. So long a period of continuous publication, running back fifty-seven years, pre-supposes qualities of enduring value in the magazine and a large measure of attachment on the part of its readers. The fact is that the editors of the magazine have been singularly successful in retaining the characteristics which gave the periodical its original hold upon the reading public, and at the same time broadening its scope and introducing new elements of variety and timeliness. All the conditions of periodical publication have greatly changed since Mr. Littell established this magazine in 1844, but while other magazines have come and gone, the old "*Living Age*" has held its place and is even more indispensable today to alert and cultivated readers than it was half a century ago. It is still the only weekly magazine in its field: and its frequency of issue enables it to reproduce the most important articles from foreign, and especially from British magazines, reviews and literary weeklies, with a freshness impossible under other conditions. Literature, art, science, biography, travel, poetry, public affairs, and the best fiction in short and serial stories find a place in its well-stored pages; and there is not a single weekly number which does not contain something which intelligent readers of whatever special tastes would be poorer for missing. The magazine is published by The Living Age Company, Boston.

Hydrochloric Acid in the Local Treatment of Sciatica. Von Eljasz-Radzikowski (*Therapeutische Monatshefte*, 1900, No. 8; *Centralblatt für innere Medizin*, November 25th) reports upon twelve cases of rheumatic sciatica treated with strong hydrochloric acid applied to areas several centimetres in diameter over the tender points in the course of the nerve and at the side of the vertebral column. In general, the acid may be applied every second or third day, but it should not be reapplied before the irritant effects of the preceding application have passed off. The pain caused by it is moderate, and sometimes there is none at all. Occasionally the first cauterization gives relief, but generally several pencillings are required, from four to eleven.

THE Cleveland Medical Gazette

MARCH, 1901.

Original Articles.

SICK-ROOM DISINFECTION.*

BY ROBERT G. SCHNEE, M. D.

Lecturer on Bacteriology and Pathology, Cleveland College of Physicians and Surgeons. Pathologist to Cleveland General and City Hospitals.

Disinfection in the hands of the modern physician is one of his most powerful weapons with which to combat the spread of infectious diseases, and at this time of the year, when such diseases are most prevalent, a few notes on the value of the ordinary disinfectants may not be amiss.

Sulphurous acid gas has been considered a disinfectant of the first importance since the idea of contagion was first advanced, and has probably held a higher place in the confidence of sanitary authorities of the past decade than any other disinfectant in use; indeed it is still considered the most reliable agent by many of the profession. Before the present methods of isolation and cultivation of pathogenic bacteria were discovered it was impossible to determine the practical value of this agent; but now that these methods have been perfected it is an easy matter to arrive at some conclusion concerning its value. In considering this method we must not lose sight of the usual measures adopted after fumigation, such as the free use of hot water and the scrubbing brush, exposure to an abundance of fresh air and sunlight, and, perhaps, a judicious use of the whitewash brush. Moreover, the organisms causing such diseases as smallpox, scarlet fever and measles are yet to be isolated and they probably are as easily destroyed as those of diphtheria, cholera and typhoid. It is probably true that

*Read before the Cleveland Medical Society, 22nd February, '01.

sulphur fumigation when properly carried out will act as a fairly efficient means for restricting the spread of some infectious diseases; but as usually applied its value is certainly questionable.

From the results of the following experiments we can readily see that it does not meet the requirements of an efficient disinfectant. Sternberg, as long ago as 1882, was of the opinion that sulphur fumigation for the disinfection of spore-bearing material should be abandoned as soon as something better could be found. Within the last few years formaldehyde has been brought forward and has been proven capable of efficient work when properly used. Large numbers of experiments testing this agent have been made by manufacturers of apparatus for its production as well as by independent investigators, with results which speak well for its value.

Questions have arisen, however, as to its value as ordinarily used as well as to the results claimed by some interested manufacturing concerns. For the purpose of throwing some light on these results, the following series of experiments were undertaken and were carried out under such conditions as usually obtain in sick-room disinfection. A room with 1,003 cubic feet space containing carpet, bedding and furniture was used. The windows and doors were sealed moderately well; but cracks in plaster and around baseboard were not closed. Such conditions do not meet laboratory requirements; but it was felt that strict laboratory precautions in this respect, however desirable, are not usually followed in routine disinfection. Furthermore, if the agents used were efficient under such conditions they surely would be when perfect conditions could be obtained.

In the use of sulphur it was found that surrounding rooms were filled with vapor; but with formalin the odor could hardly be noticed in these rooms. Then, one of the greatest objections to the use of sulphur, besides its non-efficiency, is the tendency it has to destroy colors and fabrics; while in this respect formalin is an ideal agent, as in a long experience it has never been found to affect the most delicate colors and fabrics. For this series of tests, anthrax, typhoid, diphtheria bacilli and the golden staphylococcus were used and, with the exception of anthrax, were prepared from twenty-four hours bouillon cultures of the organisms. The anthrax objects were prepared from five day cultures in peptonless bouillon and were rich in spores. These objects are numbered uniformly in this description of their preparation and in the table of results.

1. Sterile cover-glasses were smeared on one side with a large loopfull of culture, dried and wrapped in one layer of sterile lens paper and exposed in open Petri dish.

2. This set, prepared as above, was exposed wrapped in two layers of cotton comforter.

3. Two cm. lengths of cotton threads were soaked in the cultures, dried in Petri dishes and placed in short glass tubes of large calibre, these being left open at each end.

4. Prepared as in 3 and exposed wrapped in one layer of cotton comforter.

5. Twenty-four hour cultures on Loeffler's blood serum were exposed with cotton plugs removed.

These objects, after being exposed to the action of the various disinfectants as described later, were then taken to the laboratory and, with the exception of the serum cultures, were planted in bouillon and incubated for three days before they were examined and results noted. Fresh cultures on serum were made from that exposed and both were incubated. Duplicates were exposed in all cases. Bacteriological methods were followed in detail, all possible precautions being taken to avoid contamination. Pure cultures were used in all instances and control cultures always made. In those cases where growth occurred after exposure, microscopical examinations were made to verify the purity of the culture. In only a few cases did contamination occur.

Four experiments with sulphur fumigation were made. In A and B three and six pounds respectively of sulphur were used in a dry atmosphere. This was placed in an iron kettle in a tub of water to obviate all danger from fire, moistened with alcohol and ignited. In each test about four ounces of sulphur failed to burn. The room was kept tightly closed for sixteen hours and, on opening, the air was found to be most irritating to the respiratory mucous membranes. In experiments C and D four litres of water were vaporized in the room after placing the test objects. An examination of these immediately after the vaporization of the water demonstrated them to be practically dry, so it was felt that the result would differ in no essential way from that of experiments A and B. The objects were then wet with sterile water and the fumigation carried out as described with the results shown in table.

TABLE I. SULPHUR FUMIGATION.

Amount Used. Experiment.	3 Pounds. A dry.	6 Pounds. B dry.	3 Pounds. C moist.	6 Pounds. D moist.	Control.
Anthrax	1 XX	XO	XO	OO	X
	2 XX	XX	XX	XX	X
	3 XX	XX	XX	XO	X
	4 XX	XX	XX	XX	X
	5 XX	XX	XX	XO	X
Diphtheria	1 XO	OO	OO	OO	X
	2 XX	XX	XO	XO	X
	3 XX	OO	XO	OO	X
	4 XX	XX	XX	XX	X
	5 XX	XO	XO	OO	X
Typhoid	1 XO	OO	OO	OO	X
	2 XX	XO	XO	XO	X
	3 XX	OO	OO	OO	X
	4 XX	XX	XX	XO	X
	5 XX	XO	XO	XO	X
Staphylococcus pyogenes aureus	1 XX	XO	OO	OO	X
	2 XX	XX	XO	XO	X
	3 XX	OO	XO	OO	X
	4 XX	XX	XX	XO	X
	5 XX	XX	XO	XO	X

In this table as well as those following, "x" indicates that growth had occurred after exposure and subsequent incubation, and "o" that the organisms succumbed to the disinfectant. In several instances the growth was very slight, which no doubt indicated an attenuation of the vitality of the organism.

The experiments with formaldehyde were made in the room, as described in preceding tests. Parke, Davis & Co.'s generator was used in the first two, which are designated in the table of results as E and F. This apparatus is really a vaporizer, for by the heat of a blast lamp a 40 per cent. solution of formaldehyde (formalin) is rapidly evaporated, the fumes being conducted into the room by means of a small tube passed through the key-hole. Experiment E was carried out with the test organisms in a dry state, and in F these were moistened with sterile water, to obtain as nearly as possible the conditions of a room thoroughly sprayed with water.

Some authorities advise the use of the vapor dry; but others recommend the presence of moisture. The advisability of thoroughly spraying the room is clearly shown in Table II. One hundred and fifty c. c. of formalin were used in both E and F and at

the end of ten minutes' operation of the vaporizer the disinfectant was exhausted. The room was not opened for twelve hours; after which it was necessary to air for some time before it was possible to enter, as the fumes were so intensely irritating.

By reference to the table it will be seen that the results with the dry test are not much better than when sulphur was used; but when moisture is present these results are about all that could be desired.

In experiments G and H the results of which are also recorded in Table II., the Moffatt generator was employed. This consists of an apparatus which produces formaldehyde gas by the limited oxidation of wood alcohol.

It is advocated in the use of this apparatus to introduce the gas in a dry form, and also that by its operation for one hour enough formaldehyde will be produced to disinfect 1,000 cubic feet of space. Both moist and dry test objects were used here and again the results show the most thorough disinfection in the presence of moisture. Although in this test the generator did quite efficient work, the opinion is held by some investigators that a uniform efficiency cannot be depended upon by this method of producing formaldehyde. Here again the test organisms were allowed to remain in the closed room for twelve hours, then handled as in the foregoing tests. In Table II. of results by these methods it will be noted that test object No. 5 has been omitted:

TABLE 2. FORMALDEHYDE DISINFECTION.

Amount Used.		150 c. c.	150 c. c.	1 hour.	1 hour.	Control.
Experiment.		E dry.	F wet.	G dry.	H wet.	
Anthrax	1	XX	XO	XX	XO	X
	2	XX	XX	XX	XX	X
	3	XX	OO	XX	XO	X
	4	XX	XX	XX	XX	X
Diphtheria	1	OO	mould	OO	OO	X
	2	XX	OO	XO	OO	X
	3	XO	mould	XO	OO	X
	4	XX	OO	XX	OO	X
Typhoid	1	XO	OO	XX	OO	X
	2	XX	OO	XX	XO	X
	3	XO	OO	XO	OO	X
	4	XX	XO	XX	OO	X
Staph. pyo. aur.	1	OO	OO	XX	OO	X
	2	XX	OO	XX	XO	X
	3	XX	OO	XX	XO	X
	4	XX	OO	XX	XX	X

Experiments E and F, Parke, Davis & Co. vaporizer; experiments G and H, Moffatt generator.

By a careful examination of these tables it will be found that while sulphur used in six-pound quantities is nearly as efficient as formaldehyde in a dry state, the latter when used properly is much better.

Another point to be noted is the absence of complete disinfection of test-objects 2 and 4, which were wrapped in pieces of cotton comforters, thus demonstrating that neither formaldehyde nor sulphurous acid penetrate deeply, as is claimed by many.

It is said that formalin solutions when heated will polymerize quickly, interfering with further vaporization. This difficulty was not experienced at any time in this series of experiments or in its subsequent use.

One of the greatest objections to this method of disinfection put forth by the profession is its expense. It is thought that the purchase of a few pounds of roll sulphur represents so small an outlay that it would be impossible to persuade our people to pay a little more for something that is more efficient. In these days of the more elaborate sulphur candles such an amount to properly disinfect means as much or more expense than the simple formalin disinfector to be described. It was suggested during the course of the foregoing tests that if it were not necessary to purchase so expensive an apparatus this method might be brought into general use. Acting upon this, several tests were made by means of an ordinary 1000 c. c. Bohemian glass flask with a thistle mouth funnel reaching to within a fraction of an inch of the bottom and a conducting tube to carry the vapor through the key-hole. This can be heated by means of a Bunsen lamp and the requisite amount of formalin vaporized in nearly as short a time as in the expensive apparatus. It would seem advisable to use a little more of the solution, say 200 c. c., to be on the safe side; and with formalin at its present low price the cost of disinfecting a moderate-sized room would be but little more than for sulphur fumigation. This simple apparatus was thoroughly tested in the same manner as in experiments E and F, and its practical efficiency demonstrated.

Where large rooms are to be disinfected, it is possible by the addition of a little borax to 150 c. c. of formalin to dissolve in it 60 grains of paraform which then will disinfect 2000 cubic feet of space.

In conclusion, I wish to present Novy's valuable directions for the disinfection of rooms:

1. All cracks or openings in plaster or floor and about the door and windows should be closed by cotton or strips of cloth.

2. The linen, quilts, blankets, carpets, etc., should be stretched out on a line in order to expose as much surface as possible to the action of the disinfectant. They should not be thrown into a heap.

3. The walls and floor of the room and the articles in it should be thoroughly sprayed with water. If masses of matter or sputum are dried on the floor they should be soaked with water and loosened. No vessel of water should be left within the room.

4. One hundred and fifty centimeters (5 ounces) of the commercial 40 per cent. solution of formalin for each 1,000 cubic feet of space should be placed in the distilling apparatus and as rapidly distilled as possible. The key-hole and spaces about the door should then be packed with cotton or cloth.

5. The room thus treated should remain closed at least ten hours.

If there is much leakage of gas into surrounding rooms a second or third injection of formaldehyde at intervals of two or three hours should be made.

ETIOLOGY OF CHRONIC EXUDATIVE NEPHRITIS.

BY D. S. HANSON, M. D.

Consulting Obstetrician to the Cleveland City Hospital.

The Etiology of Chronic Exudative Nephritis, or, as it is more commonly called, chronic parenchymatous nephritis, or large white kidney, is quite definite, all authorities that I have consulted agreeing.

It frequently follows an acute attack of renal inflammation, notably that of scarlet fever. Although in quite a large percentage it is insidious in its onset, uræmia or dropsy being the first indication of its existence, the patient being previously apparently in good health, more frequently, however, a more or less feeble condition of health is present for some time previous to the discovery of albuminuria. This form occurs more early in life as a rule than the interstitial or diffuse variety.

Any disease that overworks the kidneys or irritates the epithelial covering of tubes and malpighian bodies, as repeated attacks

of malaria, typhoid, pneumonia, etc., leaves a tendency to the development of this pathological process, for where patches of epithelia are repeatedly destroyed they are reproduced in a condition of lessened vitality.

Alcoholic excesses and excesses in eating are no doubt sometimes the cause, and it seems to me the intemperate use of food with an inactive or diseased liver is a most prolific source of this disease, the proteids being imperfectly converted, the epithelia of kidney is called upon to separate and eliminate uric acid and other irritants almost continuously, thereby destroying the vitality of these cells.

Syphilis and pulmonary consumption sometimes precede the development of this form of nephritis and probably have an etiological relation, and it is sometimes present in prolonged suppurating processes, although the amyloid kidney is more common here.

The acute parenchymatous nephritis of pregnancy is not infrequently followed by the chronic form of the disease, probably the general nervous irritability incident to the pregnant state has a tendency to interfere with normal kidney secretion and render material carried to kidney more or less imperfect. There is also more work demanded of the renal glands, elimination having to be performed for both mother and fœtus. The nutrition of kidney is also interfered with, both by disturbance of general circulation and in later stages by direct pressure. It might truthfully be said that anything that interferes with proper digestion and nutrition, and especially any imperfect action of the liver, predisposes to this form of nephritis.

It is most common in young males. Much more often seen in temperate than in either torrid or frigid zones, and is not a very common disease.

PROGNOSIS OF CHRONIC EXUDATIVE NEPHRITIS.

BY O. B. CAMPBELL, M. D.

In exudative chronic nephritis, as in all forms of chronic organic diseases throughout the body, the prognosis is always extremely unfavorable for a complete recovery; in fact, I believe that this disease terminates regularly in destroying life under any and all forms and plans of treatment; but the length of time it will take or the exact manner of death is difficult to prognosticate.

There is no doubt that many, if not all, of the cases of chronic nephritis reported completely recovered, are not, nor have not been organic cases at all, only functional, and rest, diet and removal of the causes in these cases will in time generally procure for our patient complete recovery.

It is very difficult, I think, sometimes in the earlier stages of chronic nephritis to make a positive differential diagnosis as to whether the disease is organic or not. Hence it is always best to be very careful in making a prognosis. Then again, though this disease must ultimately prove fatal, in many cases the patient goes on for years presenting few symptoms of so serious a character as to attract attention, and this is especially true if the patient can be placed under favorable hygienic, climatic and therapeutic conditions. So that in the very chronic cases, where other organs are not involved to any great extent, it is better to make a modified favorable prognosis to the patient and friend and thereby secure the power of the therapeutic agent—suggestion.

TREATMENT OF CHRONIC EXUDATIVE NEPHRITIS.

BY F. J. MORTON, M. D.

The same principles that govern the treatment of the acute form of exudative nephritis apply here in the chronic form, modified only by the slower progress of the disease. The measures employed in the acute will be called for intermittingly in the chronic affection, for the course of the disease will present many variations and conditions will arise from time to time identical with those presented by the acute form.

Most of the writers which I have consulted devote very little space to the treatment of this form of nephritis. They simply refer to it as being treated essentially the same as in acute nephritis. Osler, last edition, devotes eight lines to the subject. Delafield, in Pepper's System of Medicine, dismisses the subject with four lines. He says: "The main indications for treatment are to remove the dropsy and restore the blood to a natural condition. It is usually necessary for a patient to give up his ordinary business, and, if possible, to pass the winter months in a warmer climate."

A brief reference to causation will be found to furnish useful indications for the prevention of this condition and the slowing of the morbid action when established. The first point is that chronic renal diseases are commonly the outcome of indulgence in

a highly nitrogenized diet. Then the second cause is exposure to cold, and especially changes of temperature. The function of the skin is closely allied to that of the kidney; not only as regards water elimination, but also as regards the elimination of nitrogenized waste. Repeated chills not only produce renal hyperæmia by the internal congestion which follows all contraction of the cutaneous vessels, but the skin being checked there is an accumulation of waste in the blood and then there is furnished another cause of renal hyperæmia and increased functional activity—the two chief factors in the induction of chronic changes. Careful thought over the relations of the skin and kidneys will not only explain the association of acute nephritis with sudden exposure, but will also elucidate the connection which exists between constant exposure and chronic renal changes and illustrate an important part in the treatment of this affection.

Whenever there exists a suspicion of renal disease the patient must be watched carefully for the less doubtful indications, which may be long in showing themselves—all the longer indeed if the treatment be justly and truly adapted to the case. It is not only the avoidance as far as may be, of any aggravation of the already existing disease that is to be aimed at; it is the avoidance of any acute condition that we must strive against. In those acute conditions lie most of the dangers to life. Where chronic disease pre-exists there acute disease is most formidable. In the phthisical acute pneumonia is ever to be dreaded. In chronic disease of liver acute hepatitis becomes most serious. And so in chronic renal disease the great matters to be avoided in those conditions of acute congestion or even of nephritis which are so apt to occur in the subjects of chronic renal changes, and to which pre-existing disease renders them so liable. The means to be adopted lie largely in the connections with the skin and the diet.

The subject of renal disease should ever be warmly clad. A warm, dry and equable climate is also desirable. Woolen underclothing is necessary at all seasons of the year, and it is well to have the kidneys especially protected by a woolen band around the body. The frequent use of warm baths, followed by shampooing, is of much use in keeping the skin active. Tissue waste should be avoided, as the waste is gotten rid of with difficulty, and tissue re-building is defective. Hence muscular exercise should be reduced to the minimum consistent with health.

Stewart gives as the essentials of a good diet that it be (1) nutritious, (2) easily assimilated, (3) non-irritating to the kid-

neys. Milk or buttermilk meets these indications better than any one article of diet. All agree that when milk alone is tolerated by patients it has great advantages over mixed diet or milk and farinaceous foods. Eminent clinicians have shown that a mixed diet will in some cases give as good results as the exclusive use of milk.

We should above all things seek that diet for the patient which he can best digest and assimilate, for we may rest assured that the products of faulty digestion and assimilation will irritate the kidneys more than any amount of normal material they may be called upon to eliminate, while at the same time the general system will suffer from lack of support.

No beverages are so good as pure water. There should be plenty of it to flush the sewers and wash out the debris from the more or less obstructed tubules. Alcoholics, even the mildest and no matter how small the amounts, are contraindicated.

No new drugs of any special importance have been added of late to the list of those previously used. The use of hydragogin is being lauded by certain German physicians in extreme dropsical conditions. How valuable the authority, I am not able to say. The remedy is a combination of drugs, as digitalis, strophanthus, etc., as I understand it. Have used it in one case with unsatisfactory results. There seems to be much difference of opinion in regard to the use of mercurius. "The use of mercury is objectionable," says Roberts, "on account of the extreme susceptibility of patients with Bright's disease to the physiological action of the drug. Severe salivation sometimes follows very small doses; in one of my patients profuse ptyalism was produced by two grains of blue pill with extract of colocynth taken on two alternate mornings."

A very recent writer, Dr. Nathan Davis, speaks much more favorably of mercurials in renal therapy. "Calomel is not only used for a clean alimentary canal and free portal circulation, but is also recommended in small repeated doses for its diuretic effects—the elimination of nitrogenous waste, and will, as an alterative, promote a better flow of lymph, the absorption of interstitial exudates, and even of foreign material in the convoluted tubes."

By keeping the urine alkaline casts are formed in smaller numbers—are partly dissolved, and much of the granular matter is carried into solution. Alkaline diuretics will make the urine alkaline and therefore help to keep the renal tubules permeable. The salts most frequently used are the citrate, acetate and bitartrate of potash.

Many writers during the past twenty-five years speak of Basham's Mixture as an efficient remedy for anæmic cases. Several fruitless inquiries were made to find out exactly what Basham's Mixture is. Was finally obliged to interrogate Basham himself. Here is what he says in a little volume published just thirty years ago:

"A long experience of these and other forms of renal disease where the object of treatment is similar has, however, convinced me that a soluble ammonio chloride obtained by acidulating the *Liquor Ammonii Acetatis* with dilute acetic acid and then adding the tincture of the chloride is the most efficacious of all the so-called preparations of steel."

In a recent review of this subject Andrew H. Smith says a concise statement of the problem is this: Given renal disease with renal inadequacy on the one hand and loss of albumin and general malnutrition on the other, how are we to strike the balance so as to keep up the nutrition without irritating the kidneys.

Now in considering this problem, it is all important that we should have a correct standard for estimating the condition of the patient so that we may know whether any particular regimen is benefiting him, or the reverse. The standard generally accepted is the amount of albumin excreted by the kidneys. But this is not wholly correct, for the fluctuation in the quantity of albumin is much oftener the result of changes in diet than of changes in the disease.

It is impossible to escape the conviction that many authorities in employing this standard unconsciously assume an analogy between albuminuria and glycosuria, although in one case the abnormal element in the urine is drawn from an abnormal element in the blood, while in the other it is drawn from a normal and necessary one. In glycosuria it is the presence of sugar in the blood that constitutes the danger; in albuminuria it is the loss of albumin from the blood that exhausts the vitality.

The only ground upon which the amount of albumin lost could be taken as the index of the gravity of the disease would be that albumin escaped from the kidneys only in proportion as their condition was abnormal and that no other factor than this abnormality entered into the case. And yet we know that changes of diet alone often produce an increase or diminution of the percentage of albumin in the urine. If, then, we institute these changes with the purpose of affecting the output of albumin, what becomes of the staff with which we were to measure the disease? The

only true standard is to be found in the general condition of the patient. If, on changing from a non-nitrogenous diet to a nitrogenous one we find a general improvement in the patient's condition, it is an evidence that the change was beneficial, no matter if the albumin fills a larger portion of the test tube. On the other hand, if we cut off a large proportion of animal food from the diet, and our patient grows more weak and dyspeptic, more anæmic and dropsical, it is nothing to the point that only one-half or one-third of the former quantity of albumin is found in the urine—the change has done harm, and the sooner we change back again the better.

AMYLOID KIDNEY.

BY A. S. MASCHKE, M. D.

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In 1842 Rokitansky first described a form of kidney disease which he differentiated from the ordinary chronic inflammations. He called this disease "speckniere," or lardaceous kidney, also noted the accompanying changes in the liver and spleen and connected them with certain cachectic conditions.

His idea that the process consisted of a fatty or lardy change was overthrown by Meckel, who showed the characteristic reaction of the substance with iodine and sulphuric acid, and held it to be cholestearin.

Virchow later interpreted this reaction as evidence of the starchy nature of the substance, and gave it the name amyloid. Since then numerous chemists, including Von Kekule and E. Ludwig, have settled the fact of the proteid nature of the substance by demonstrating nitrogen and sulphur in it, by showing its solubility in pepsin and hydrochloric acid, and by recovering leucin and tyrosin after treating with dilute sulphuric acid.

How the original proteid substances of the kidney are converted into the peculiar amyloid substance is not known.

Wills and Todd in England, and Traube in Germany, first gave us the clinical picture of amyloid kidney.

ETIOLOGY.

Amyloid kidney is a secondary affection that depends upon some diseased blood state. This is shown by the fact that amyloid kidney is always bilateral, that the same process is always present in other organs, as the liver, spleen, adrenal, etc., and also that the arterioles and capillaries are always attacked first.

All cachectic conditions do not produce amyloid in the same degree. By far the greatest number of cases occur during the course of chronic pulmonary tuberculosis, and especially when there are also tubercular intestinal ulcers. It occurs most frequently with the form of tuberculosis showing cavity formation and profuse expectoration, but also with the chronic contracting process with bronchiectasis.

The next most common causes of amyloid are the chronic suppurations, and especially those of bones and joints, but also of other parts, such as chronic ulcers of the leg and foot, long-standing pemphigus, profuse mucous membrane suppurations, as cystitis and pyelitis and empyema.

In the third class come syphilis, both hereditary and acquired, especially if untreated; also, as Rokitansky observed, severe rickets; amyloid has been found several times with severe malarial cachexias, with leukemia, with carcinoma, even though there be no breaking down or ulceration, and very rarely without any demonstrable cause.

Artificial amyloid has been produced in the spleen in dogs and chickens by establishing prolonged suppurative processes. Albrecht disputes the existence of amyloid kidney without a previous nephritis, and Osler calls it simply an event in the process of a chronic Bright's, but numerous other capable pathologists have reported cases in which no evidence of a previous nephritis could be found and in which no nephritis could be demonstrated in the portions of the kidney free from amyloid.

Amyloid kidney exists at all ages except, perhaps, the newborn, but is most common between the ages of 20 and 40. The male sex seems somewhat more frequently affected than the female.

Leube noted the comparatively few cases of amyloid at Wurzburg, and suggested the possibility of a climatic influence.

PATHOLOGY.

The gross pathological picture of amyloid kidney varies, inasmuch as it is usually engrafted upon either a chronic parenchymatous or a chronic interstitial nephritis. In the former case we have a large, plump, firm kidney, of a waxy or butter-like color, with a peculiar homogeneous glassy appearance and a glisten. The cortex is wide, the glomeruli prominent, the capsule thin and peels readily. The appearance of the kidney is very similar to that of a subacute parenchymatous nephritis.

The other form, the so-called amyloid contracted kidney, dif-

fers only from the ordinary contracted kidney in the peculiar gliscen of its cut surface. In a great many cases the macroscopic diagnosis of amyloid is impossible, unless we employ one of the so-called amyloid reactions.

Lugol's solution of iodine and potassic iodide is the best test. It colors amyloid substance a dark mahogany brown and the other tissue yellow, the addition of dilute sulphuric acid usually turning the brown to a violet or blue.

Various anilines, especially methyl or gentian violet, are used and they turn amyloid substance purplish red and the other tissue blue. For microscopic differentiation, Van Gieson's stain, thionin and hæmatoxylin-eosin, give good contrasts.

Amyloid attacks primarily the blood vessels in the glomeruli and sometimes remains restricted to these. The vessel walls become glassy and thick, the nuclei faint, and the lumen narrowed, even to obliteration. Later the vasa-efferentia and the intertubular vessels are affected. In the majority of cases the degeneration advances no farther, but in others the uriniferous tubules, the interstitial tissue and rarely the capsule are attacked.

Cardiac hypertrophy is rarely found.

Free fluid in the abdomen, the so-called "ascites cachecticus," occurs quite frequently. Also amyloidosis of other organs, such as liver, spleen, intestinal mucosa, adrenal, etc., and finally the original process to which the amyloidosis is secondary.

Amyloid kidney secondary to syphilitic cachexia is usually in the form of amyloid contracted kidney.

SYMPTOMATOLOGY.

Many cases of amyloid kidney are undiagnosed inter-vitam and first found at autopsy, because the symptoms and signs and urinary findings could all be explained by the primary process.

The typical urinary findings, however, are as follows: The daily amount of urine is large and varies from the normal maximum up to enormous quantities; the color is pale yellow, the specific gravity low, 1012-1005, reaction slightly acid, rich in albumin, sediment either absent or else very scant, and in the sediment a few hyaline or fatty casts, occasionally a few leucocytes and kidney epithelial cells, and very rarely a few red blood cells.

In these characteristics the urine varies greatly. The daily quantity varies greatly and with it the color, acidity and specific gravity. The amount of albumin varies also and it may be absent for some days and then reappear.

Purdy states that albuminuria is an essential accompaniment of amyloid kidney, but a few cases have been reported by Leube and others in which there was absence of albumin throughout the entire course of the disease.

The amount of albumin is higher for the amount of sediment, and the daily quantity varies more in amyloid than it does in the ordinary chronic Bright's. The albumin consists usually of serum albumin and globulin, and Senator showed that the globulin was present in greater proportion in amyloid than in the other kidney diseases. His observations have been confirmed by numerous others, among them Tyson.

There may be present, also, symptoms of amyloidosis of other organs, especially the intestinal mucosa and liver, also œdema of the legs and ascites.

The duration of the disease varies greatly, but is usually from a few months to a year. The so-called acute amyloidosis can be fatal within a few weeks, and, at the other extreme, a case of amyloid kidney of fifteen years' duration has been reported.

The cases of longer duration are probably cases of amyloid contracted kidney.

PROGNOSIS.

The prognosis is necessarily bad, depending in beginning cases to a great extent upon the course of the primary cachexia, and being fatal in all clinically well-defined cases.

DIAGNOSIS.

Inasmuch as the great majority of cases of amyloid are engrafted upon a previous nephritis, and inasmuch as the urinary findings in amyloid can be identical with those of a nephritis, it is usually difficult to tell clinically when and where the amyloidosis is present. The great variations in the daily amount of urine, the variations in the amount of albumin, the scantiness of the sediment as compared with the amount of albumin, and the large proportion of globulin are the principal points to aid us. Even then the diagnosis is difficult, except we find evidence of amyloidosis of the other organs, such as a progressively enlarging liver, not tender, smooth and firm, and frequent profuse diarrhœa. Finally the diagnosis should never be made without the presence of one of the well-known etiological cachexias.

Several authors mention the amyloid reaction in casts, but Osler says it is rarely demonstrated, Leube that he has never found it, notwithstanding patient and frequent search, and other observers say it is of no diagnostic import when it is found.

TREATMENT.

The treatment of amyloid kidney consists in treating the dis-crasia upon which it depends. Iodine preparations of various kinds have been given, directed against the degenerative process itself, but without avail.

FACIAL ERYSIPELAS.*

BY C. W. RACE, M. D.

Assistant Surgeon Soldiers' Home, Sandusky, O.

In presenting the subject of erysipelas, it is not the intention of the writer of this paper to go extensively into the etiology, pathology or diagnosis of this so common affection, but simply to present a brief history of the treatment that is generally employed at the Ohio Sandusky Soldiers' Home, and to give to you the results of such treatment of such cases in those of advanced years.

By erysipelas we understand an infective, diffusely spreading inflammation, commonly affecting the skin or sub-cutaneous tissue, less frequently the mucous membranes or sub-mucous tissues, and still more rarely the serous membranes and the connective tissue in such situations as the pelvis, orbit, etc.

The exciting cause of this disease we believe to be due to one form of the streptococcus infection, known as the streptococcus erysipelatosus of Fehleisen.

The pathology is essentially that of spreading inflammation affecting certain regions, but presenting some peculiarities common to all forms of streptococcus infection.

The general course and the diagnosis of erysipelas is undoubtedly very familiar to you all, and I would only call attention to the fact that at times erythema, some forms of eczema and dermatitis, and also an erysipelatoid form of cellulitis may be mistaken for this disease.

The character of the eruption, the sharply defined margin, the temperature and a little care will generally suffice to differentiate between them.

The treatment of this disease, like many others, widely differs; some authors recommend one course, some another, and still others practically nothing at all.

Bichloride of mercury solution phenic acid, salicylic acid, cocaine, ergotine, morphine and many other remedial agents have

*Presented at the Northern Ohio District Medical Meeting at Lorain, 26th July, 1900.

been injected into and about the diseased region with more or less good effect.

Ice, tincture of iodine, nitrate of silver, carbolic acid, resorcin, acetate of aluminum, or lead, and a host of others have been variously applied or rubbed into the affected region.

Tincture ferri chloride internally at one time enjoyed a reputation as almost specific in this disease, but the experience of the writer wholly accords with the teachings of Osler, that tincture ferri chloride is only useful to increase the percentage of haemoglobin or correct anaemia in those cases in which it is present.

Quinine and the bitter tonics are useful as the indications of the case may direct.

The treatment used at the Soldiers' Home has been the external application of the sulpho-ichthyolate of ammonium. This is usually mixed with an equal volume of flexible collodion, and the affected parts are heavily painted with this, and if the varnish cracks or scales it is renewed at once by a fresh application.

The other conditions are treated as they arise.

This treatment has been most satisfactory, in fact there has never been a death in the cases so treated which could be directly attributed to the erysipelatous infection.

In conclusion I wish to present the clinical history of two cases which offered the greatest resistance to this treatment.

Case I. George Van S., aged 55 years, white, a farmer by occupation, was admitted to the hospital Feb. 15, 1896. His family history presented nothing of special pathological importance.

His personal history revealed a luetic infection. The urinalysis was negative.

On May 13, 1896, the disease began by a chill and the characteristic eruption under both eyes and extending across the bridge of the nose. His temperature was 103.5 degrees F., pulse 135 and irregular. There was severe pain in the forehead and the nose, and the bowels were constipated.

On May 15 the disease had extended over the entire face and forehead, the temperature was 103.5 degrees F. and the pulse 140.

The bowels had been freely evacuated.

On May 16, the temperature and delirium had not abated, and the disease extended over the entire scalp and down the back of the neck.

On May 18 the temperature was 103.3 degrees F., the pulse 141. There was present a muttering delirium and the disease had invaded the genital organs, the inguinal and suprapubic regions.

The patient could not secure sleep except by the aid of hypnotics.

On May 23 the temperature was 103 degrees F., pulse 138. The swelling of the head and face had almost entirely disappeared. The disease had extended from the hip to the middle of the dorsal region and over the abdomen to the umbilicus. There was present a mild delirium, the bowels were regular and the sleep not so much disturbed. At this time, for the first, the patient asked for food.

On May 27 the temperature was 101 degrees F., pulse 130. The disease had slightly extended over the gluteal region, his sleep was good and appetite improved.

On June 2 the temperature was 102.4 degrees F., pulse 135. The inflammation which had extended over the back of the neck had almost entirely disappeared.

On June 5 the temperature was 101.6 degrees F., pulse 120, and there was a slight extension on the right knee. At this time the inflammation had entirely disappeared from the body except the right inguineal region. The general condition of the patient was good.

On June 16 the temperature was 99 degrees F., pulse 110. The appetite was good, the bowels regular, the sleep somewhat disturbed, but the erysipelatous process had entirely disappeared.

The *treatment*, externally, was the sulpho-ichthyolate of ammonia with collodium. Tincture ferri chloride and tonics, with morphine and cathartics were administered as the indications of the case demanded.

Case II. George C., white, aged 74 years, carpenter by occupation. The family history and urinalysis were negative. There was a previous personal history of syphilis, rheumatism, with the resulting cardiac disease, and some form of brain fever.

The disease in this case began about the nose, traveled up over the head and down the back as far as the lower margin of the gluteus maximus.

The highest point in the temperature curve was 105 degrees F. There was a profound delirium and albumen in the urine.

The disease in this case lasted about three weeks and terminated in recovery.

These cases present the picture of some of the more serious forms of this disease, as we occasionally have to deal with. The milder cases usually terminate in about two weeks and rarely, under this treatment, present any delirium or serious complications.

LETTERS FROM PARIS.

BY H. E. HANDERSON, M. D.

(Continued from page 118).

A materialistic philosopher under the hands of a Galenic physician would afford a spectacle for gods and men. Thomas Hobbes, the English philosopher, was taken sick in Paris in 1651 and received the professional care of Patin, who records the course and results of their acquaintance in the following extract:

"I sent you my last letter on the 15th of August, and the very same day I was called to see a patient. It was Mr. Hobbes, who wrote a book on 'The Citizen,' translated into French by our good friend, M. Sorbriere. I found the poor man in a tolerably bad condition. His abdomen was hard, he suffered from colic and vomiting and his pain was so severe that he wanted to kill himself. Hobbes is a stoic, melancholic, and, moreover, an Englishman. I improved his condition somewhat by food and enemata, inasmuch as he refused to be bled (though he greatly needed it), under the pretext that he was 64 years old. The next day, having insinuated myself a little further into his good graces, he permitted me to bleed him, with the result of giving him great relief. Afterwards he alleged, as an excuse for his behavior, that he had no idea such bad blood could be drawn from him at his age, and from this time on we became great friends and comrades. I allowed him to drink as much small-beer as he wanted, and finally, after a gentle purgative, he was restored to health. He thanked me very heartily and said he meant to send me something nice when he reached England. I hope sincerely that he will go home gay and happy, even without the hope of other recompense."

It would seem that even a stoic philosopher may wish to kill himself to escape pain, and yet be afraid of the lancet. Likewise pay his doctor's bill with fair promises. Philosopher or simpleton, we are all pretty much alike!

But the women! Ah, the women were just as troublesome and meddlesome in Patin's day as in this fin de siecle period. Poor Patin recognized this truth to his sorrow. Can it be that a grave Galenic doctor of Paris could be treated so unceremoniously by a woman in the seventeenth century?

"Noel Falconer himself carried the letter to Madame de Label. Her son is still sick; she would not believe me, and, instead of using my remedies, she gave him some medicine of her own, *quo agnito recessi*. A woman who meddles with our business is a stupid animal. Such business belongs only to those who wear breeches and a well-made head. I had bled and purged the patient and he was feeling better, when she declared that my purgatives made him worse and that she would purge him with her

own little remedies, which she had heretofore used in Lyons. As soon as I understood from these words that she did not place much value upon my prescriptions, I left her, following the precept of the Messiah, *sinite mortuos sepelire mortuos*. Perhaps, however, her son will get well, and I hope with all my heart that he may, for if he should die she would say that it was I who killed him. She told Noel Falconer that she was sorry to have offended me and that she would send me my fee (I have never received it). . . . It is not within the capacity of a woman to practice after the method of Galen; *res est sublimioris intelligentiæ*. It requires a stronger intellect. *Mulier est animal dimidiati intellectus*. They should ply their distaff or at least, as St. Paul says, *contineant se in silentio*. The late M. de Villeroi, the great Secretary of State, who had a bad wife (he was not alone and the race is not dead) used to say that in Latin woman was mulier, that is, a mule to-day, a mule to-morrow, a mule always (*mule hier, mule demain, mule toujours*)."

Patin must have been mad, mad clear through, to couch his objurgations in such a mixture of French and Latin. The French pun on mulier has a genuine Galenic flavor.

Patin was very human. Even the Dean of the Faculty of Paris apparently shares the common foibles and prejudices of mankind. Witness his amiable feelings towards his mother-in-law. In a letter written from Paris, July 13, 1649, he says:

"My mother-in-law has just died at the age of eighty-two years. She was in her country-house at Corneilles, near Argenteuil. She was seized with a profuse vomiting and at the same time lost sensation and motion in half her body, and soon after this paralysis became an apoplexy. The news was brought to me at midnight and I went to see her the next day, but found her *in extremis*. She was an excellent housekeeper, but I cannot give myself the trouble of mourning her death, since she was rich, old, penurious and very often sick. We are having deep mourning made for us at the Bourgeoise, I am sorry to say, but one must keep up with the fashions. It is not one of the least efforts of wisdom to be able to suffer all the follies of men; but those who cannot share them have only to follow the example of my mother-in-law."

Doubtless this has a heartless sound to our modern ears, but it was probably merely the cultivated insouciance of a man of the world in the days of Patin.

TOBACCO.

BY C. E. FORD, '02.

Tobacco, as concerns us, is the dried leaf of *Nicotiana Tabacum* prepared for smoking, chewing, or to be snuffed. Under one

or the other of these forms the use of tobacco is more widely spread than any other narcotic or stimulant. However much the fact has been controverted, there is no doubt that tobacco was originally used by man in this country previous to Columbus' discovery. The term tobacco originated from a peculiar instrument used for inhaling tobacco smoke by the early inhabitants. This instrument consisted of a hollow tube, shaped like a "y," the two ends of which were inserted in the nostrils of the devotee, the single tube being held in the burning tobacco, the smoke of which was then inhaled.

The tobacco plant was first imported into Europe in 1558 by Francisco Fernandes, a physician, who was sent out by Phillip II. with an exploring expedition to investigate the products of Mexico. By the French ambassador to Portugal, Jean Nicot, the seeds of tobacco were first sent from the peninsula to the Queen, Catherine de Medici. The services rendered by Nicot in spreading the knowledge of the plant have been commemorated in the scientific name of the genus, *Nicotiana*, as well as in that of its principal alkaloid. At first the plant was supposed to possess miraculous properties as a medicine and was variously designated, *herba panacea*, *herba santa*, *sana sancta indorum*, *divine tobacco*, etc. Ralph Lane, the first governor of Virginia, and Sir Francis Drake brought with them, in 1586, from the first American possessions of the English crown, the implements and materials for tobacco smoking, which they handed over to Sir Walter Raleigh. Lane was credited with being the first English smoker, and through the example and influence of the illustrious Raleigh, who "took a pipe of tobacco a little before he went to the scaffold," the habit became rooted among the courtiers of the Elizabethan period. From this time the indulgence of tobacco spread with marvelous rapidity throughout all nations, in the face of the most resolute opposition of statesmen and churchmen, the counterblasts of a great monarch, penal exactments of the most severe description, the knout, ex-communication, and capital punishment.

The influence of tobacco on health and morals has been, ever since its general use, a fruitful source of controversy. On all grounds, except as medicine, it met the most uncompromising opposition, but it was precisely the expectations entertained regarding its medicinal virtues which were completely disappointing. Much has been said and written of the tobacco habit, very little in its favor, however. We must admit its decided injuriousness when used to excess. When moderately used, a matured man suffers

no very serious effects. In youth the habitual use of this narcotic is most pernicious, there being a tendency to decrease body and mental vigor, even when mildly used. Susceptibility to the toxic influence of tobacco increases with age. After the fortieth year the quantity of tobacco consumed must be lessened, or disturbance of vision may result, among the more common of which is tobacco amblyopia. If taken in considerable doses the results are usually so quickly fatal that no visual phenomena are noted. Sometimes sudden blindness may take place in acute tobacco intoxication as, for example, a patient who suffered from blindness after the application of tobacco to a hollow tooth. There is also on record a case of death resulting from the use of a tobacco enema. The deleterious effects of the tobacco habit are dependent upon many varied circumstances and conditions, such as quality and quantity consumed, racial peculiarities, manner of usage, etc. The active principle of tobacco is nicotin, which varies considerably, *e. g.*, Havana tobacco contains 2 per cent., Maryland tobacco 2 1-3 per cent., Virginia tobacco 6.9 per cent. and Kentucky tobacco about 7 per cent. Turkish tobacco has a wide range, containing from .75 per cent. to 6.87 per cent. of nicotin.

The method of smoking has a decided influence on toxicity, the subject being more susceptible if much tobacco comes in contact with the mucous membrane of the buccal cavity or saliva becomes impregnated and swallowed.

Before going further it might be well to enumerate the components of tobacco. Like those of all vegetable matters, arrange themselves under the threeheads of water, mineral acids and bases, and organic substances. According to investigation carried out in Gay Lussacs laboratory, the amount of ash from 100 parts of tobacco leaves is from 18 to 22 per cent. The greater part of this ash consists of insoluble salts, principally carbonate of lime and the soluble part, as potash salts, which vary in quantity from 5 to 35 per cent. Tobacco contains no soda. In addition to the foregoing, tobacco contains salts of ammonia and nitrates. According to Schloesing, the proportion of nitric acid has nothing to do with the length of time a lighted cigar will glow spontaneously. This quality is the function chiefly of the potash present, in combination with organic acids. An incombustible tobacco, *i. e.*, a tobacco which does not keep a glowing ash, contains its organic acids in the form of lime and magnesia salts. The explanation is, that while organic potash salts, being fusible, yield a porous

charcoal which glows readily, the corresponding infusible lime salts yield a compact charcoal, which is far less combustible. According to analysis, tobacco is composed of the following organic compounds:

Nicotin, a volatile liquid alkaloid, .75 to 9 per cent. Essential oil, important in the flavor, a minute quantity. Nicotianin, a camphor-like body to which the odor is due. Malic and citric acid 10 to 14 per cent., regarded as anhydrides. Acetic acid, 3 per cent. Oxalic acid, 1 to 2 per cent. Pectic acid, 5 per cent. Resins, fats, 4 to 6 per cent. Sugar and cellulose, 7 to 9 per cent. Various albuminoids, about 25 per cent.

The nicotin determines the strength of tobacco, but not its flavor and aroma. As to the composition of tobacco smoke, numerous investigations have been made. Kissling, experimenting with cigars, found that a large proportion of the nicotine passes unaltered into the smoke. Dealing with a tobacco containing 3.75 per cent. of nicotin, he recovered from the smoke 52.02 per cent. of the total nicotin consumed, while in the unconsumed remains of the cigar the proportion of nicotine was increased to 5.03 per cent. With a second experiment, having as before 3.75 per cent., nicotin, the smoke yielded only 27.83 per cent. of the total nicotin consumed, and the percentage in the unconsumed remains was raised to 4.51 per cent.

The composition of tobacco smoke is highly complex, but beyond nicotin the only substances found in appreciable quantities are the lower members of the picolin series. Nicotin is one of the most rapidly fatal poisons known, rivaling prussic acid in potency. A case is recorded in which an unknown quantity was forcibly placed in the throat of a victim of murder, in which death ensued after five minutes. Poison was detected on the tongue, in the throat, stomach, liver and spleen. Death was caused by paralysis of the respiratory nerve centers.

Some of the most marked symptoms of tobacco poisoning are anorexia, irregular alimentary action, restlessness, sleeplessness, lack of concentration, failure of memory, impaired sexual function, disturbances of circulation, irritable heart—known as tobacco heart—which is a functional derangement producing irregularity of action, due to the poisonous effect of nicotine on the nerves controlling its action.

Upon the nervous system, nicotin has a decided effect. It paralyzes the nerves controlling the muscles of the iris, the pupil becomes dilated, often with pain. Nicotin has a soothing effect

on the wearied brain, but on the fully nourished it acts as an irritant. It has a most pronounced effect upon the cord, in extreme cases, both sensory and motor nerves may be effected, as shown by insensibility, convulsions and paralysis. Through the sympathetic nervous system secretions are disturbed, as also is the regulation of the involuntary muscular contraction, as is illustrated by muscular spasm of the stomach, and by vomiting produced on the first attempt at smoking, by boys. The secretion of glands may become uncontrollable, the salivary glands are excited to over secretion. Swallowed nicotin causes irregular secretion of gastric juice and often a deficient amount is produced, thus causing dyspepsia and loss of appetite.

The muscular contraction of the intestines is increased; in moderate smokers this acts as an aperient, but if carried to excess the muscles become paralyzed and constipation results, the sequelæ of which are many. Disturbances of this nature, being functional, the tissues quickly regain their normal condition when the use of tobacco is discontinued.

In sore throat the mucous membrane becomes inflamed, tonsils enlarged, sometimes enormously, and softened, causing great annoyance during act of deglutition. Carbon inhaled into the lungs acts as an irritant to the mucous membrane of the bronchial tubes, while this does not cause organic disease, the poisons cause an enfeeblement of the system. Thus the resistant power is impaired and disease results, especially if there be hereditary predisposition. The blood becomes thinner and in some cases paler. Under the microscope the red blood corpuscles are found fewer in number and lie widely separated, the tendency to form rouleaux is lost. The form of the corpuscle is changed from the double concave, with a smooth border, to an oval form with a crenated border, which indicates a change in the density of the protoplasm of the cell. The ammonias have the effect of dissolving the blood corpuscles. The absorption by the blood of the various poisons inhaled when smoking lessens its oxygen carrying capacity, hence oxidation of the tissues is arrested and disintegration retarded. Poisonous products are quickly eliminated through the lungs, kidneys and skin. One day's abstinence will usually restore the blood to its normal condition. In extreme cases cardiac and vascular tetanization, angina pectoris and delirium tremens have resulted from an overdose of tobacco. Tobacco chewers who accidentally swallow a quid almost invariably suffer nausea, giddiness, confusion of head, severe retching, cold, clammy

skin, trembling of limbs and violent purging with difficult respiration. In cases of general tobacco poisoning there is very little doubt that the constitutional disturbances are not due to nicotin alone. Le Bon has found prussic acid. Vohl, Eulenburg and Zulinsky have isolated pyridin, pecolin, lutidin, parrolin, collodin, rubidin, viridin, also carbolic acid and marsh gas. Krause also states that marsh gas is also present. Of the above mentioned, pyridin has been investigated as to toxicity, and it has been found that large doses act as a respiratory paralyzant and depressor of the spinal cord.

Cigar and cigarette smokers are probably less exposed to nicotin poisoning than others. It is probable that their immunity arises from the fact that tobacco which is smoked in a pipe yields much larger proportion of the volatile bases and especially a larger quantity of the very volatile and stupefying pyridin, while in a cigar little pyridin and much collodin is formed, the latter being less volatile and active than pyridin. The inhalation of smoke seems to lessen the resisting power of the subject, acting as an irritant, causing a greater or less inflamed condition of the mucous membrane. Of all methods of using tobacco, that of snuffing seems to be attended with less evil results than others, there being but few cases recorded and in these the symptoms are but a mild form of those which have been given. The explanation is that a much less quantity of tobacco comes in contact with the mucous membranes.

Col. Theodore Roosevelt, vice-president-elect of the United States, whose career has been of an adventurous and stirring character, is a pleasing subject for the writer of juvenile tales. In a recent issue of the *New Golden Hours*, a weekly periodical for boys, published at 24 Vandewater street, New York City, this story is running in serial form: "Teddy Roosevelt's Protege; or, The Prince of Cowboys in the Bad Lands." In the story the author, Will Lisenbee, treats the famous hero of San Juan Hill in a sensational and attractive way. At all times "Teddy," as he is familiarly called, proves equal to the most dangerous and trying situations. His adventures in Cuba at the head of the Rough Riders are graphically told, and he carries out all that the youthful, or more mature for that matter, mind can paint him.

Abstracts and Extracts.

BY WM. CLARK, M. D.

The injection must be made under the most rigid aseptic precautions; the back must be thoroughly scrubbed and the hands of the operator making the injection are cleansed as carefully as though a major operation were to be performed. The needle and syringe are boiled. The length of the needle should be from 6 to 8 cm., and it should have a short bevel at the point.

The injection should be made between the fourth and fifth lumbar vertebrae, the opening between the transverse processes being greatest there. The point for the introduction of the needle is found by drawing an imaginary line from one iliac crest toward the other, over the spinal column; this strikes the fourth lumbar vertebra. About half an inch below and to either side of this is the place where the needle should be made to enter. The patient is now directed to incline forward, thereby arching the spine and causing a greater separation between the transverse processes. The doctor holds the needle near its end, to prevent its bending, and thrusts it quickly through the skin, this being the most painful part of the procedure. The needle is now pushed slightly inward toward the spinal canal; when the subarachnoidean space has been entered, resistance to the needle stops and the clear cerebrospinal fluid comes out of the needle drop by drop. A few drops are allowed to escape, and then the syringe which contains the cocaine solution is attached to the needle, and the solution is injected very slowly. All the solution being injected, we wait a minute or two before withdrawing the needle, and this is done just as slowly as it was inserted. The puncture point is now covered with a little collodion.

The time which elapses after the injection is made for the analgesia to be complete enough to operate in, varies as a rule from four to twenty minutes; yet, recently I have seen two failures. In the first instance no analgesia was produced at all, and in the second case it extended only up to the thighs. I am not enthusiastic about this method of anaesthesia, and I do not believe that we are justified yet in giving it a permanent place in surgery. I have been told that several deaths directly traceable to the method have been reported.—*Technique of Medullary Narcosis* by Herman J. Boldt, M. D., N. Y., *Medical Journal*.

I know that there are all sorts of schemes, corsets, apparatus and braces (as my American friends call them) for treating spinal caries without keeping the child flat. But they are all wrong—wrong in theory and wrong in practice; and if they could be cast into the bottomless pit, and every case of spinal disease could from the beginning be treated by continuous rest in the horizontal position, there should be no more of those unsightly humps to invite speculative interference. Of course, I do not include in my anathema Phelps's box split, the double Thomas's split with head piece, or any form of cuirass which takes the child in bodily and keeps him flat. Indeed, the design of each one of them is well-nigh perfect; but what I want utterly and severely to condemn is the modern ambulatory treatment of spinal caries. Indeed, I think it probable that after all this stir about the new treatment of humpbacks by forcible straightening has subsided, a most important beneficial clinical outcome will be that every surgeon will feel himself compelled to be far more careful in the adoption of patient and efficient prophylactic measures in the early days of the disease.

As I look back through many years of active hospital practice, I cannot divest myself of the thought that the plaster-of-paris jacket-treatment, of which, I confess, I have been a warm advocate, must be held responsible for much of the existing deformity of Pott's disease. Many a time have I seen the angular projection coming on and increasing when the child has been getting about in a plaster-jacket or some other form of support.

Though the child is to be lying flat for six, twelve, eighteen or more months, he is not to be shut up in a close bedroom. The windows are to be kept open and he is to be carried out every day into God's blessed sunshine, which is as necessary for warm-blooded animals as for plants. His muscles are to be maintained in good trim by massage, but he is to be kept all the time in a horizontal position. I know that in these days of activity and progress such unromantic treatment demands great confidence on the part of the parents in the judgment of the practitioner who insists upon it, but no little experience of it enables me with the utmost confidence to recommend it. Certainly it is not a new method. Hear what Sir Benjamin Brodie says upon the subject. This is the sentence at the very beginning of his valuable chapter on the *Treatment of Caries of the Spine*: "From the first moment, therefore, in which the nature of the case is clearly indicated, the patient should abandon his usual habits and be confined altogether on his bed or couch."—Edmond Owens, M. B., F. R. C. S., in *Montreal Medical Journal*.

THE TREATMENT OF SYPHILIS.—A NEW AND TOLERABLE FORM OF
ADMINISTERING MERCURY, WITH REPORT OF 65 CASES
TREATED AT BELLEVUE HOSPITAL.

The writer states that when his attention was called to Mercuriol as an antiseptic of special value in the treatment of gonorrhoea, it occurred to him that it would be a first-class preparation for the treatment of syphilis. Some time was necessarily spent in determining its proper dosage. At first one-eighth of a grain was given three times daily, and this dose was gradually increased until it was found that three grains was the average quantity required to control the malady. The highest amount given was seven grains and the lowest amount that exerted a controlling influence upon the disease was one-half grain. In starting a patient on a course of Mercuriol the author advises beginning with half grain or grain doses. Salivation has been produced by two grains, and yet as much as six grains has been taken with no disagreeable symptoms.

The objections to the use of unguentum hydrargyri as a remedy in secondary syphilis are referred to; and while the popularity of mercuric protiodide is conceded, the irregularity of its action and its tendency to cause gastric and intestinal disturbances are not overlooked. In the writer's experience 33 per cent. of his cases were not benefited by this drug.

Mercuriol is a nucleid of mercury, and was discovered by Karl Schwickerath, of Bonn, Germany. Kopp, director of the Royal Polyclinic for Genito-urinary Diseases at the University of Munich, uses Mercuriol in smaller doses, which leads the writer to remark, "he will find, as I have done, that it is desirable to use a much larger dosage." Mercuriol should not be given in solution with potassium iodide.

In all, 65 cases received Mercuriol at the Bellevue clinic, 60 of which had not had previous treatment. Of these, 13 did not return after the first or second visit; 14 did not remain long enough under treatment to give the preparation a fair trial; and 13 may be described as new patients. Deducting these 40 cases, there remain 25 cases that have been sufficiently long and regular in their attendance to supply data from which definite conclusions may be deducted. The detailed histories of these 25 cases are included in the paper. In summarizing the author's remarks that while two months' treatment of syphilis is insufficient to determine absolutely the value of any remedy, the marked improvement shown by many

of his cases makes it certain that Mercurool is of great value. Its superiority to mercuric chloride in controlling the symptoms of syphilis is proved. Like all internal remedies it has very little effect upon the initial lesion; still it has hastened the healing slightly. None of the cases required treatment with potassium iodide to control secondary manifestations.

To recapitulate, (1) Mercurool causes less disturbance of the gastro-intestinal tract than any other preparation of mercury used internally. (2) It controls skin eruptions and pains much better than any other preparation, while it controls mucous eruptions as well as any other, and has equally as good an effect upon the chancre. (3) It is an advantage that it can be taken in pill form.—*Winifred Ayres, M. D., New York, in Philadelphia Medical Journal.*

* * *

Ought there to be a law preventing those who are undoubtedly tuberculous taking upon themselves the responsibility of parentage? There are some who would answer this affirmatively and without hesitation. But what would the church in general say to it, and what would the tuberculous curate in particular say to it? He would tell us that he reads in the very beginning of his Book that he is to "Be fruitful and multiply;" and, to do him justice, it must be admitted that in England, at any rate, he does his best to carry out this instruction to the very letter. But let him finish the injunction—Man was to be fruitful that he might *replenish* the earth. Now, though I do not claim to be in possession of peculiar knowledge on this point, I cannot think that the Great Architect of the Universe, who "saw everything that he had made and, behold, it was very good," could have desired that this beautiful world was eventually to be stocked with so large a proportion of tuberculous rubbish.

I am fully conscious of the fact that in suggesting the desirability of preventing the marriage of tuberculous subjects I am advancing a somewhat extreme measure, but surely the subject enters very largely into the question of prophylaxis. It is one, moreover, that will have to be deliberately approached and dealt with some day, and that, perhaps, soon. I do not think that our Houses of Parliament as at present constituted will be anxious to occupy themselves with an attempt to solve this question, vast as its imperial importance is, but I think that the County Councils which we have lately established through England might find the

task not uncongenial. The question is fully as important as that of water-supply, or of protection from fire, or of the isolation of infectious disease, each of which is already in their grasp. Indeed, I think that it falls in under the last heading. And what scope it would afford for discussion!—*Edmund Owens, M. B., F. R. C. S., in Montreal Medical Journal.*

* * *

TREATMENT OF HEMORRHAGE IN PHTHISIS.

No matter what the origin or source of the hemorrhage the text-books generally recommend ergot by the mouth or ergotin hypodermically, with the sole and certain result of a disturbance of digestion or a possible abscess. As to any direct or indirect influence on the hemorrhagic site, there is nothing to be said. Pharmacological experiments have long since taught us that the physiological effect of ergotin on the lung consists merely in contracting the blood-vessels, and where this occurs there is also danger of increased blood pressure and gangrene. Because ergot checks atonic bleeding from the uterus through its oxytotoxic properties, should it also be applicable to pulmonary hemorrhage? For years I have used no other treatment in hemorrhage than psychical quieting of the patient, rest in bed, and palliatives for an irritative cough; finally, when the heart is weak and rapid, digitalis, and, at critical times, ligature of the extremities and subcutaneous salt infusions.

It is not my custom to keep the patient for days or weeks on cold and liquid nourishment. What possible styptic influence on a bleeding lung can cold drinks and ice in the stomach exert, or how can lukewarm food increase blood pressure more than cold?

Liquid nourishment is used to spare the patient the necessity of sitting up and chewing. The sucking of ice is helpful in irritation of the throat. Ice bladders on the lungs have only an immobilizing effect, and are better applied over the heart itself. As a means of subduing cough, where a quick result is desirable, morphia hypodermically holds a sovereign place. Codein is to be preferred for continued use, beginning with 4-5 cgm. doses, but only against coughs which are purely irritative and disturb the night's rest.—*Edward M. Schaeffer, M. D., in Maryland Medical Journal.*

* * *

Very few households will permit the practice of well-organized and disciplined maternity work. This I learn not only from

my own experience, but from that of many others. How are we to overcome this? It is very difficult and uphill work for a few men to teach the masses; but it seems to me, that if we were to institute a united effort, that it would be possible to teach our patients in such a manner that they would forget their present ideas and consider us more than mere mid-wives, if we could teach them that they are to be cared for from the time of conception until involution; that we can do much to relieve the discomforts of pregnancy; that by frequent urinary analysis we may be able to render them less liable to eclampsia; that cleanliness is next to Godliness; that their beds should not be made or covered with old quilts or carpets, or with soiled linen, but with linen fresh from the iron; that the patient should have an enema sufficient to unload the bowels before the second stage of labor; that the vulva should be thoroughly shaved and scrubbed and kept closed with a sterile napkin; that in the primipara, with rare exception, lacerations occur; that irrigation, medicated or unmedicated, is harmful; that self examination is interdicted; that the physician is the better judge of the competency of the nurse; that the proper time for the resumption of household cares and duties does not depend upon the number of days, but upon the condition of the patient, which should not be before involution has taken place; and, last, but not least, the patient should submit herself within two months after labor to a most careful examination, and if any defect is found it should be immediately repaired; if, I say, we would all do this, I am confident we would evolute at least a notch in the right direction.—*Chas. E. Congdon, M. D., in Buffalo Medical Journal.*

* * *

Many years since I had come to observe among the inmates at the asylum that those who had many glands destroyed by suppuration seemed to escape more serious tubercular trouble. In other words, the enlargement, softening and discharging of the contents of a large number of these glands protected the individual, in the larger number of instances, from consumption. On the other hand, a sufficient number of cases have been seen where absorption has been brought about by the use of iodine and other means locally, to establish the fact that the disappearance of the swollen glands is quite likely to be followed by the discovery of tubercular disease in some other part, generally the lungs. In fact, we became convinced that where many glands were involved and the engorgement extensive it was highly dangerous to promote absorption, and that cases did far better which were allowed to sup-

purate and after complete softening, opened by free incision, the abcess cavity washed with antiseptic solution, and if slow in healing thoroughly curetted.

An examination of the case book at the Thomas Asylum, made ten years since, showed at that date that there had been received during the preceding seven years 260 children; that out of that number 54 cases of hypertrophy of glands, tubercular in character, occurred. In 35 of these cases the enlargement disappeared by absorption, and was followed in 18 of this number by tuberculosis of the lungs, with 14 deaths. In the remaining 19 cases, profuse and extensive suppuration took place, the glands were entirely destroyed and in 8 cases the abscess cavities were thoroughly curetted. Out of this number there were four cases of pulmonary tuberculosis with two deaths.—*A. D. Lake, M. D., in Buffalo Medical Journal.*

There need not be the slightest apprehension on the part of anyone that the vast throngs sure to attend the Pan-American Exposition at Buffalo in 1901 cannot be successfully and expeditiously handled. Buffalo is the greatest railroad center in the world, and assurances are given that the roads converging there, fully alive to the possibilities of the Exposition, are going to make ample provisions for safely and rapidly handling all comers. Work on the Pan-American terminals of the New York Central and the Erie is being pushed, and arrangements will be made for the accommodation of the trains of nearly all other roads on these terminal tracks. The International Traction Company will increase its facilities proportionately, expending the enormous sum of three millions of dollars in doubling and extending its street tracks in Buffalo, in additional terminal facilities, in the purchase of rolling stock, and in the betterment of its trolley line to Niagara Falls, where connection is made with the surface road running thence to Queenston on the Canadian side of the river, and with the "Gorge Route," which skirts the base of the chasm, through which the Niagara pours its pent-up floods in thundering rapids and seething whirlpools.

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Editorial.

NECESSITY VERSUS ETHICS.

If one thing more than another shapes our destinies, moulds our characters, and acts as a mental stimulus leading on to success or failure, honor or dishonor, greatness or mediocrity, it is *necessity*—or the lack of it.

Self-preservation is truly the first law of nature, and how completely it is governed by necessity—the antidote of indolence, and the spark igniting those energies which, if not misdirected, will enable the individual to round out his fullest stature.

The law of the *survival of the fittest* is dominant and inflexible, in lower life. With man, however, in his modern civilization there are many influences and conditions which modify its general application, and it seems to us that this is particularly true in the medical profession. Here social qualifications and connections, and financial conditons are factors often more potent in shaping the destinies of a young physician than the more laudable mental and intellectual qualifications. Pope says:

“Vice is a monster of so frightful mien,
As to be hated, needs but to be seen;
But seen too oft, familiar with her face,
We first endure, then pity, then embrace.”

Is there not a world of truth in these lines? Continued association breeds contempt, and urgent necessity is the serpent of temptation, inducing the first backward step—after this others are taken with less reluctance until the habit is formed.

No sane man is so low as to stoop to the level of wrong-doing for the love of it; but once on that level, it usually requires strong moral forces to rise above it—forces which, if existing, would probably have prevented the downward trend in the first instance.

The medical profession is enormously over-crowded. So indeed are other walks of life; but in the commercial and manufacturing worlds development is constantly taking place, and new enterprises are commanding and giving employment to good men. Indeed, commercial competition and congestion acts as a stimulus to the development of the resources of a country, and react to the advantage of all. With the advance of medical science, however, the demand for the physician becomes less. The prevention of disease is the ideal to be sought, and it is not altogether creditable to the wisdom of the profession, that in its praiseworthy endeavor towards self-destruction, it should be so constantly on the alert to increase its numbers. With the discovery and the practical application of the laws of hygiene, the demand for the physician is growing less. To become established in medicine is becoming more and more difficult, and in that battle for a footing the weaker are either driven out, or are tempted to stoop to practices more or less questionable. How many physicians have become abortionists, or have entered the ranks of the advertising quacks, through the urgent necessity of making a living, it would be interesting to know. Others accept a commission from the surgeon, “pocket” a “rake-off” from the druggist, or unnecessarily prolong their visits for the same reason.

The intelligent physician, in treating disease, strives, when possible, to remove the cause, yet the profession does not apply this principle in the endeavor to rectify professional ills. In fact, we are constrained to believe it is increasing an evil by creating a supply of young doctors far in excess of the demand, many of whom are known to be essentially unqualified to assume the responsibilities of the guild.

The system of ethics subscribed to by physicians has always been above criticism, and is as near ideal as theory can make it, but theory and practice are often antagonistic, the latter being modified in a measure, to apply to existing conditions, while the former is the rule for ideal ones.

The young man entering the field of medicine to-day is confronted by conflicting interests. He is impressed with the necessity of complying with professional ethics, and he is confronted by the equally pressing necessity of keeping body and soul together. He must not expose an alluring bait for his neighbor's patients, yet perchance he sees his neighbor, in the hospital clinic, receiving patients gratis, who could abundantly afford to meet his modest fee. This is pardonable, he is told; for it is done for the good of the clinic and the students who are soon to become his competitors. He must not advertise, yet he sees many about him endeavoring to approach it as near as they dare, without taking the courageous and fatal leap of paying for it at so much per column.

Verily, the young man entering the arena of our noble profession to-day without money, backing or influence is scarcely to be envied. If he possesses courage, endurance, perseverance, patience, brains, grit, tact, determination and industry, it may offset, in a measure, the more immediate advantages of means and position, but not every one is endowed with all of the redeeming traits of the race, and for him who is not, the road to success and independence is beset with manifold temptations.

Few men are altogether great, and fewer still are sufficiently strong to rise above and disorganize established conditions.

The ethics of the profession must be superior and not subordinate to commercialism. The two are thoroughly antagonistic, and the wonder is that the code is not transgressed oftener than it is.

The profession persists in countenancing overcrowding, and the world takes advantage of its weakness in demanding medical service for a fraction of its real value.

One of the wealthy and aristocratic private schools in this city has on its staff a physician whose duty is to attend the pupils when sick. The doctor receives nothing for his services, although the students of the establishment are recruited from wealthy and well-to-do families. As long as physicians can be found who are willing to give their services free, even to the opulent, advantage will be taken of it. And the medical code, at least in its practical application, seems sufficiently elastic to countenance such practices.

This is only one instance of many which we might mention if space did not forbid. Why do our brethren persist in serving on the staffs of hospitals and medical schools without remuneration? Is the action prompted by pure philanthropy, or because some personal advantage seems to be attached to these positions? Undoubtedly the latter is the real reason, and we are far from wishing to criticize these gentlemen for so doing, under existing conditons.

We believe that one of the best solutions of the free clinic abuse, of quackery, humbug and cheapness in its various bearings is to put a stop to low-grade medical education; to raise the standards all along the line, so that the medical graduate will come to his professional training as well qualified as his brethren in the other learned professions.

G. SEELEY SMITH.

THREE EARLY LAPAROTOMIES IN NORTHEASTERN OHIO.

Some time ago, while calling on Dr. Julian Harmon, of Warren, Ohio, as we were discussing the great advances of surgery in the last few decades, Dr. Harmon casually mentioned that laparotomies had been successfully performed by his own father, aided by the practitioners in the vicinity, early in the century. It was not so much the habit then, as now, to record everything one did, indeed, some of those pioneer physicians were over modest as to their accomplishments, and medical journals were by no means so numerous as now in proportion to the population. Dr. Harmon gave me the particulars of these operations as he had heard them when a young man, and I urged him to put the cases in writing. The following letter is his response:

Dear Doctor:—Some two or three years ago I promised you to write up some bits of surgery which occurred in old Trumbull

three or four score years ago. It may interest surgical antiquarians and be of some permanent value. At all events, it will show the stuff which was in four Trumbull county pioneer doctors. It may be the like was in others for "there were giants in those days."

In June, 1820, Drs. Enoch Leavitt and John B. Harmon removed a fatty tumor from the pelvis of Mrs. Eggleston, living at or near Mantua. It weighed thirty pounds. She made a fairly prompt recovery and bore some children after, as she had before.

Some fifteen or twenty years ago Dr. Homans, of the Massachusetts Hospital, reported in the Boston Medical and Surgical Journal three cases of his own and collated from American and European journals six others—all of which were fatal. The case of Mrs. Eggleston was the earliest and seems to have been the only successful one and is, therefore, worthy of remark.

In July of 1822 Dr. Leavitt proposed to remove a tumor from a Mrs. Norton, who lived in Warren township—some three miles from the village. Dr. Leavitt thought it was ovarian, but Dr. Harmon thought it was cancer of the liver. Dr. Leavitt proposed to operate with the assistance of two younger physicians. At the last the woman refused to undergo the operation till Dr. Harmon should be present. He was called and Dr. Leavitt opened the abdomen. Finding the case as Dr. Harmon told him he would, he asked what they had better do. "You have got her opened, and may as well cut out what you can." Handing the knife to Dr. Harmon, Leavitt said, "You do it." Five scirrhus tumors from the size of a goose egg to a pullet's were dissected from the under surface of the liver, the largest being imbedded deep around the gall bladder. The hemorrhage was profuse and the woman nearly died on the table. Brandy, laudanum and ammonia finally pulled her through. The doctors staid by her bedside ten days and nights—one being always with her. She lived three and a half months. During that time she became able to ride to the village several times to consult her physician, but in the latter part of November reached the end of her suffering.

In 1836 Robert Gordon, a brick and stone mason, while doing some heavy work at Ashtabula, was hurt by a heavy piece of timber or a limb from a tree falling on him across the abdomen. As soon as he could be moved he was brought to his home in Warren. He remained in great pain and very feeble. Dr. John W. Seeley and Dr. Sylvanus Seeley (his son) and Dr. Harmon finally concluded to open the abdomen. A large tumor had gradually

formed. A large flap was turned down, the intestines drawn down and out; the tumor was solid, imbedded between the liver, stomach and mesentery, all of which were firmly adherent to it. The operation was slow, lasting some three and a half hours. The oozing of blood proved very obstinate. In fact, it was current talk that nearly one-half his liver was cut out. He was a hardy man and would take nothing before the operation. Convalescence was slow. Between two and three months passed before he left his bed, and he was sallow for a year or two after, but eventually became able to resume his work, and lived to be eighty or more years old. I never heard my father speak of these operations or even allude to them except once when, in 1840, Mr. Gordon was laying a cellar wall for him and was lifting a heavy piece of stone and had to stop and take a second hold. My father said, "Robert, it hurts, does it, eh?" Robert said it did, "for it was too high a lift." "Don't try to show how smart you are again," was the caution his old doctor gave him. "A man who has had his liver cut out mustn't try to lift." I think it probable that his liver had been touched more thoroughly than if a dozen liver cleansers had been run through it.

The main thing to remember is that in 1820, 1822 and 1836 three successful laparotomies were done in old Trumbull without anaesthetics and without antiseptics.

Yours truly,

JULIAN HARMON.

The doctor might have added with equal truth: Without even a hemostat that any modern operator would think of using."

These cases of Doctors Harmon, Leavitt and Seeley show what stuff the pioneer doctor was made of. They show that Dr. Ephraim McDowell, of Kentucky, was only one of a type of men scattered along our frontier, men marked by accurate anatomical knowledge, unflinching courage of their convictions, fertility of resource, and scrupulous personal cleanliness. It was McDowell's fortune, however, to have dealt with a pathological condition sufficiently common to attract attention to his success and inspire others to follow his example. Dr. Harmon was as bold and skillful a surgeon as he, but was dealing with pathological rarities only.

L. B. TUCKERMAN.

RESOLUTIONS ADOPTED BY THE CUYAHOGA COUNTY MEDICAL SOCIETY ON THE DEATHS OF
DRS. W. H. NEVISON AND H. J. HERRICK.

At the last meeting of the County Society, the following resolutions were adopted by the Society in regard to the deaths of Drs. W. H. Nevison and H. J. Herrick:

Whereas, the untimely death at the beginning of a promising professional career has removed from our membership Dr. Wm. H. Nevison, one whom we had learned to respect, both for his scientific attainments, his technical skill and his personal character;

Resolved, That we, the members of the Cuyahoga County Medical Society, hereby extend to his relatives our heartfelt sympathy for their irreparable loss;

Resolved, That a copy of these resolutions be spread upon the minutes of the Society, be transmitted to the relatives of the deceased and given to the daily and medical press for publication.

Whereas, in the death of Dr. H. J. Herrick, the Cuyahoga County Medical Society has lost a member who, from the inception of the Society, has taken an active interest in its proceedings, and has filled its presidential chair with credit to himself and to the Society.

Resolved, That we, the members of this Society, hereby express our appreciation of his services to the Society and to the profession of medicine in Cleveland, and extend to his relatives and friends our sympathy in their bereavement;

Resolved, That a copy of these resolutions be recorded in the minutes of the Society, be transmitted to the relatives of the deceased, and be given to the daily and medical press for publication.

MOSQUITOS AND THE PART THEY PLAY IN
PRODUCING MALARIAL DISEASE.

This subject has been fruitful in producing considerable discussion. For the purpose of gaining further knowledge of the matter certain tests were carried out, during the past summer, on the Roman Campagna where malarial fever is very prevalent and where all the permanent inhabitants suffer from malarial cachexia. An account of the tests, as contained in the *New York Medical Journal*, is as follows:

Five healthy individuals have lived in a hut on the Campagna since early in July without contracting the disease, the only precaution taken being protection against mosquito bites. The windows and doors of the hut are fitted with mosquito-netting screens, and mosquito nets are placed around the beds. The dwellers in the hut go around the country freely in the daytime, but are careful to be within doors from sunset to sunrise. Not a grain of quinine has been taken by them. Dr. Manson also reports the following apparently conclusive experiment: Mosquitos infected with the parasite of benign tertian malarial fever were sent from Rome to England, and were allowed to feed upon the blood of a perfectly healthy individual (Dr. Manson's son, who had never had malarial disease). Forty mosquitos, in all, were allowed to bite him between August 29th and September 12th. On September 14th he had a rise of temperature, with headache and slight chilliness, but no organisms were found in the blood. A febrile paroxysm occurred daily thereafter, but the parasites did not appear in the blood until September 17th, when large numbers of typical tertian parasites were found. They soon disappeared under the influence of quinine.

Dr. Manson concludes his report by stating that "the solution of the malarial problem lies (1) in avoiding the neighborhood of native houses, the perennial source of malarial parasites; (2) in the destruction, so far as possible, of the breeding pools of *Anopheles*; and principally (3) in protection from mosquito bites."

It may be considered as proved that the mosquito bite forms one of the modes of entry of the malarial parasite into the human body. That it is the sole mode of infection cannot be quite so positively asserted. It is not specifically stated whether the same water was used for drinking purposes by the inhabitants of the hut as by the native inhabitants of the Campagna. It does not seem probable that all cases of malarial disease can be due to mosquito bites, and water-borne infection doubtless plays a large part, even though, so far, we have not been able to demonstrate the malarial parasite in water.

New Books.

A HANDBOOK OF THE DISEASES OF THE EYE AND THEIR TREATMENT.
By Henry R. Swanzy, A. M., M. B., F. R. C. S. I. Examiner in Ophthalmology to the University of Dublin; Surgeon to the National Eye and Ear Infirmary, and Ophthalmic Surgeon to the Adelaide Hospital, Dublin. Seventh Edition with 165 Illustrations. \$2.50. Philadelphia. P. Blackiston's Son & Co., 1012 Walnut St. 1900.

This most successful work has now reached a seventh edition. It has been carefully revised, a few paragraphs have been omitted and many have been inserted or rewritten. Some of the new additions to this issue are an account of Dr. Mackenzie Davidson's

method of employing the Rontgen rays for the detection and localization of foreign bodies within the eye, a description of Mules' operation for ptosis, and three very valuable tables which give the actions and relative values of the various mydriatics, myotics, and local anaesthetics in ophthalmology.

The index could be improved, for instance, where there are several references to any subject the chief one could be distinguished by larger type, as this would facilitate reference. On the whole the book has been thoroughly brought up-to-date.

EDWARD LAUDER.

DISEASES OF THE EAR, NOSE AND THROAT AND THEIR ACCESSORY CAVITIES—A CONDENSED TEXT-BOOK. By Seth Scott Bishop, M. D., L.L.D., Professor in the Chicago Post Graduate Medical School and Hospital, Surgeon to the Illinois Charitable Eye and Ear Infirmary, etc. Philadelphia, New York, Chicago. The F. A. Davis Co., publishers.

This small volume of less than 500 pages contains more information than is generally found in a text-book twice its size. It is compact, is written in a close descriptive style and is illustrated beautifully with 100 colored lithographs and 168 additional illustrations. The print is good, and the publishers have spared no pains in making the book attractive, easily read, and have placed the price within the reach of all. Every physician and surgeon in city or country should possess at least one volume of this kind, and if his library may be made more complete, too many books of such a comprehensive character, on special subjects, cannot be obtained. A book so well illustrated and so clearly written is easily understood and will enable any possessor of it to become quite proficient in the diagnosis and treatment of cases now overlooked by many, or passed unheeded by others. The use of the head mirror and special instruments is much more common in general practice than was formerly the case, but no physician can well afford to leave unseen the conditions of the nose and throat, which become so obvious under a good reflected light.

Doctor Bishop has written this book for students, men of little previous knowledge on the subjects treated of, and for the easy and ready reference of all. How well he has succeeded can only be seen by a close inspection of the work, which we recommend most cordially. It is written in four parts, as follows:

Part I—Diseases of the Ear.

Part II—Diseases of the Nose.

Part III—Diseases of the Pharynx.

Part IV—Diseases of the Larynx.

C. W. S.

AMERICAN TEXT-BOOK OF PHYSIOLOGY. Edited by Wm. H. Howell, Ph. D., M. D., Professor of Physiology in Johns Hopkins University. Vol. II, royal octave, of nearly 600 pages, fully illustrated. Cloth, \$3.00 net; sheep or half-morocco, \$3.75 net. Philadelphia and London; W. B. Saunders & Co., 1900.

Even in the short time that has elapsed since the first edition of this work there has been much progress in Physiology, and in this edition the book has been thoroughly revised to keep pace with this progress. The result is that the American Text-Book now represents the most modern work on Physiology. Statements and theories that have been shown to be wrong or improbable have been eliminated, and the new facts discovered and the newer points of view have been incorporated.

The chapter upon the Central Nervous System has been entirely rewritten in the light of the latest knowledge, with the intention of rendering this important branch of the subject suitable to the needs of students and practitioners. A section on Physical Chemistry forms a valuable addition, since these views are taking a large part in current discussion in physiological and medical literature.

The first edition of this work was pronounced to be the best exposition of the present status of the science of Physiology in the English language, and in its revised form the book will doubtless remain the leading work on Physiology for students and practitioners. The subjects comprised in this volume are: Muscle and Nerves; Central Nervous System; Special Senses, Special Muscular Mechanisms, and Reproduction.

STUDENTS' EDITION, A PRACTICAL TREATISE ON MATERIA MEDICA AND THERAPEUTICS, with special reference to the Clinical Application of Drugs. By John V. Shoemaker, M. D., L. L. D., Professor of Materia Medica, Pharmacology, Therapeutics, and Clinical Medicine and Clinical Professor of Diseases of the Skin in the Medico-Chirurgical College of Philadelphia; Physician to the Medico-Chirurgical Hospital; Member of the American Medical Association, of the Pennsylvania and Minnesota State Medical Societies, the American Academy of Medicine, the British Medical Association; Fellow of the Medical Society of London, etc., etc. Fifth Edition. Thoroughly revised. $6\frac{1}{4} \times 9\frac{1}{2}$ inches. Pages vii-770. Extra cloth, \$4.00, net; Sheep, \$4.75, net. F. A. Davis Company, Publishers, 1914-16 Cherry Street, Philadelphia.

In the preface we find the following: "The experience of the author in the class-room has led him to make a change in the scope of the fifth edition. So many new remedies from the chemical laboratory and from the vegetable kingdom have been intro-

duced during recent years that he has decided to divide the work into two independent issues, one (the present) to be known as the Students' Edition, and the other, which will be forthcoming shortly, as the Physicians' Edition."

This, the Students' Edition, includes nothing beyond the description of those drugs and preparations which are official in the pharmacopœias of the United States and Great Britain, together with some of their chemical modifications. The metric system, which is becoming universally adopted, is used in giving the doses in the text, together with their equivalent in the English system.

The publishers have done their part well—the print being clear, on good paper, and the whole nicely bound.

ATLAS AND EPITOME OF SPECIAL PATHOLOGIC HISTOLOGY. By Docent Dr. Hermann Dürck, Assistant in the Pathologic Institute; Prosector to the Municipal Hospital, L. I., in Munich. Authorized translation from the German. Edited by Ludvig Hektoen, M. D., Professor of Pathology in Rush Medical College, Chicago. Circulatory Organs; Respiratory Organs; Gastro-Intestinal Tract. With 62 colored plates, 158 pages. Philadelphia and London, W. B. Saunders Co., 1900. Price \$3.00 net.

It is a pleasure to add a good word to the praise already bestowed on the *Medicinische Handatlanten* of Lehmann which Mr. Saunders, with commendable enterprise, has offered to the English-speaking profession in the form of an authorized translation, beautified by the original lithographic plates to which the German publications largely owe their fame, and to the list of Saunders' Medical Hand-Atlases already published the one now under consideration is a worthy addition. One only regrets that it is not more complete, that it does not cover the whole field of special pathologic histology—for it seems a hardship to be compelled to wait for the two companion volumes promised in the near future. But, so far as it goes, it is a delightful descriptive and pictorial presentation of the chief microscopic pathologic lesions to be found in the organs of which it treats.

Apparently the resources of lithographic art for which the Germans are famous have been fully called into requisition in the execution of the plates, and this, with original drawings of remarkable accuracy, make the illustrations quite equal to any of their kind now published. The author's text, while comparatively brief, brings out the chief features of the various lesions depicted in the plates, and the occasional notes by the American editor are well-chosen additions. That the work is a new one is at once apparent in the appearance of several plates and descriptions

founded upon the application of some very recently introduced histologic methods like the Weigert and orcein stains for elastic tissue, the Sudan III stain for fat, and by attention paid to such subjects as the proliferation of the various mesodermic cells in the lesions of infections, to focal necrosis, to capillary thrombosis, and the like. With good sections of the various tissues and appropriate microscopic aid, this little book provides the means for obtaining an excellent course in the pathologic histology of the organs treated—a course that one with a moderate laboratory experience could take without the aid of a teacher. Further, for those teachers of pathology who rely upon drawings or plates to illustrate their exercises in the laboratory this manual will prove desirable and convenient. Even for mere didactic study it is highly to be recommended, especially as a companion volume for some of the more elaborate but less extensively illustrated treatises on pathology. A looseness in the translation and occasional oversight in the proof-reading mar the text in places.

A. P. OHLMACHER.

AN AMERICAN TEXTBOOK OF GENITO-URINARY DISEASES, SYPHILIS AND DISEASES OF THE SKIN. Edited by L. Bolton Bangs, M. D., Consulting Surgeon to St. Luke's Hospital and the City Hospital, New York, and to the Methodist Episcopal Hospital, Brooklyn; Visiting Genito-urinary Surgeon to St. Mark's Hospital, New York; Late Professor of Genito-urinary and Venereal Diseases, New York Post-Graduate Medical School and Hospital, and W. A. Hardaway, A. M., M. D., Professor of Diseases of the Skin and Syphilis in the Missouri Medical College, St. Louis. Physician for Diseases of the Skin to the Martha Parsons Hospital for Children, and to St. John's Hospital, St. Louis. Illustrated with 300 Engravings and 20 Full-page Colored Plates. Cloth \$7.00; Sheep or Half Morocco \$8.00. Philadelphia and London; W. B. Saunders & Co.

In presenting this valuable work to the profession the publishers provide us with a modern one-volume treatise, covering the same ground that heretofore required the possession of two or three works. The work considers the diseases of the genito-urinary organs, the venereal diseases, and affections of the skin in a comprehensive and detailed manner, so that it is hoped it will meet the requirements of both students and practitioners.

The text has been amply illustrated with typical portraits both in color and in black and white, and especial attention has been paid to the reproduction of drawings made under the microscope.

The contributors to this volume number forty-seven, and all are well-known authorities in the branches represented in this undertaking.

The volume contains 1,229 pages, the print and illustrations are clear, and the binding fully up to the high standard as furnished by the publishers.

STUDIES OF THE PSYCHOLOGY OF SEX, THE EVOLUTION OF MODESTY, THE PHENOMENA OF SEXUAL PERIODICITY, AUTO-EROTISM. By Havelock Ellis. The F. A. Davis Co. 1900.

This work of 275 pages consists of studies of the three subjects indicated on the title page; these are considered by the author to be complete in themselves as far as they go, but are designed to be chiefly useful as an introduction to a more comprehensive work to be published later. The volume shows evidence of a painstaking and critical study of literature and vital statistics bearing on the subject, as well as of people living under ordinary social conditions. Authors and subjects are separately indexed.

ON GALL STONES AND THEIR TREATMENT. By A. W. Mayo Robson, F. R. C. S. Professor of Surgery in the Yorkshire College of the Victoria University, etc., etc. Illustrated with 20 Engravings. 12 mo. PP. 285. 1892. Cassell & Company. London.

This monograph is one of those convenient clinical manuals for practitioners and students of medicine issued by Cassell & Company. It is of convenient size, well arranged and clearly written.

TUCKERMAN.

MODERN SURGERY. General and Operative. By John Chalmers Dacosta, M. D., Professor of the Principles of Surgery and of Clinical Surgery, Jefferson Medical College, Philadelphia; Surgeon to the Philadelphia Hospital and to St. Joseph's Hospital, Philadelphia. With 493 Illustrations. Third Edition, Revised and Enlarged. Cloth \$5.00. Half Morocco \$6.00. Philadelphia and London. W. B. Saunders & Company. 1900.

Invariably it is found that both the student and general practitioner will seek knowledge from those of his books which are neither complete but cumbrous works, nor the incomplete but concentrated compends. In the surgical science this volume fills such a position. It has now reached its third edition and much new matter has been added. The original plan of the work is

still adhered to; obsolete and unessential methods, fanciful theories and unprovable hypotheses have been excluded. The author does not introduce chapters on ophthalmology, gynecology, rhinology, otology and laryngology, "Because," as he states, "of the obvious fact that in the advanced state of specialized science only the *specialist* is competent to write upon each of these branches."

A large amount of space has been devoted to fractures and dislocations, the great practical importance of these subjects calling for full discussion. The book should find a ready acceptance from those desiring an up-to-date work for ready reference.

ESSENTIALS OF DIAGNOSIS; ARRANGED IN THE FORM OF QUESTIONS AND ANSWERS; PREPARED ESPECIALLY FOR STUDENTS OF MEDICINE. By Solomon Solis-Cohen, M. D., Professor of Clinical Medicine and Therapeutics in the Philadelphia Polyclinic; Lecturer on Clinical Medicine in Jefferson Medical College; Physician to the Philadelphia Hospital and to the Rush Hospital for consumptives, etc., and Augustus A. Eshner, M. D., Professor of Clinical Medicine in the Philadelphia Polyclinic; Physician to the Philadelphia Hospital, etc. Second edition, revised and enlarged, Philadelphia and London. W. B. Saunders & Co. 1900. \$1.00.

The purpose and scope of this volume are well stated by the authors in a preface, "It is elementary in character, devoid of detail and represents but an outline of the subject with which it has to deal—everything has been sacrificed to accuracy and brevity." The introduction is well written and is worthy of a more pretentious work. The popularity of the work is shown by the appearance of a second edition at this time.

MODERN MEDICINE. By Julius L. Salinger, M. D., Demonstrator of Clinical Medicine, Jefferson Medical College, and F. J. Kalteyer, M. D., Assistant Demonstrator of Clinical Medicine, Jefferson Medical College. Handsome octavo, 800 pages, fully illustrated. Cloth, \$4.00 net. W. B. Saunders & Co. Philadelphia and London.

At the present day clinical medicine should take into account a study more or less complete of the important specialties, such as physical diagnosis, bacteriology, the examination of the sputum, the gastric contents, the urine, the blood, the feces, etc. The authors of this book on "Modern Medicine," recognizing this fact, have incorporated between the covers of a convenient sized volume much information—both in text and illustrations—that will prove of value to the student and practitioner.

In a number of the articles the section devoted to treatment is altogether too brief to do justice to a treatise on Modern Medi-

cine. No doubt this fault will be remedied in a subsequent edition of the work which in all probability will soon be called for.

The make-up of the volume is faultless, as may be inferred from the firm whose reputation as medical book publishers is international.

IRWIN C. CARLISLE.

SURGICAL PATHOLOGY AND THERAPEUTICS. By John Collins Warren, M. D., LL. D., Professor of Surgery in Harvard University; Surgeon to the Massachusetts General Hospital. Illustrated. Second Edition With An Appendix. Containing an Enumeration of the Scientific Aids to Surgical Diagnosis, Together with a Series of Sections on Regional Bacteriology. Cloth \$5.00, Half Morocco \$6.00. Philadelphia and London. W. B. Saunders and Company. 1900.

The physician who begins the practice of medicine in the present advanced state of that science, cannot be regarded as thoroughly equipped if he has not a good knowledge of both pathology and bacteriology. In this volume the author has aimed to associate pathological conditions as closely as possible with the symptoms and treatment of surgical diseases, and has presented, in a very readable form, many subjects that received but little attention at the time of graduation of many practicing physicians.

To this, the second edition, an appendix has been added which embodies all important changes; it also enumerates the scientific aids to surgical diagnosis, and presents a series of sections on what may be termed regional bacteriology.

The work contains 873 pages, and is illustrated by 135 cuts and 4 colored plates.

To every physician who aims to keep abreast with the progress in our profession this volume will appeal as a necessary adjunct to his library.

A TEXTBOOK OF THE PRACTICE OF MEDICINE. By James M. Anders, M. D., Ph. D., LL. D. Professor of the Practice of Medicine and of Clinical Medicine in the Medico-Chirurgical College, Philadelphia; Attending Physician to the Medico-Chirurgical and Samaritan Hospitals, Philadelphia, Etc. Illustrated. Fourth edition. Thoroughly revised. Cloth, \$5.50. Sheep or Half Morocco, \$6.50. Philadelphia and London. W. B. Saunders & Co. 1900.

This is an exhaustive treatise upon general medicine, and has many commendable features peculiarly its own, not least of which is a close association of the clinical symptoms with the pathology of disease.

Bacteriology is also prominently mentioned in reference to special pathology. Much pains have been taken to make the differential diagnosis clear, and for this purpose not less than fifty-six diagnostic tables have been introduced.

Much that is new is to be found in its pages, and it deserves high rank as an authority upon general medicine. G. S. S.

THE DISEASES OF THE STOMACH; by William W. Van Valzah, A. M. M. D. Professor of General Medicine and Diseases of the Digestive System in the New York Polyclinic Medical School and Hospital, and J. Douglas Nisbet, A. B., M. D., Adjunct Professor of General Medicine and Diseases of the Digestive System in The New York Polyclinic Medical School and Hospital. Illustrated. Philadelphia and London. W. B. Saunders & Co. 1898.

This is a most thorough and exhaustive work upon a much neglected and imperfectly understood subject, and will prove invaluable to the general practitioner. It is clear, concise and logical in its treatment, and up-to-date in every particular.

The book is divided for convenience into six sections, the first being introductory; the second treats of Diagnosis and Diagnostic Methods; the third of General Medication; the fourth of Dynamic Affections of the Stomach; the fifth of the Anatomical Diseases of the Stomach, and the sixth of the Vicious Circles of the Stomach.

RUDIMENTS OF MODERN MEDICAL ELECTRICITY. Arranged in the form of Questions and Answers. Prepared especially for students of medicine. By S. H. Monell, M. D., Professor of Static Electricity in the International Correspondence School; Founder and Chief Instructor of the New York School of Special Electro-therapeutics; Member of the New York County Medical Society, etc. New York. Edward R. Pelton, Publisher, No. 19 East Sixteenth Street. 1900.

This is a small volume of 165 pages. As stated in the title page, it is arranged in the form of questions and answers and prepared especially for students of medicine. The table of contents is as follows: What is Electricity?; What is Medical Electricity? Electro-therapeutic Prescribing; Electro-physics; Electro-physiology; Electro-therapeutics.

The work will be found practical as a guide to the student of electro-therapy.

Society Proceedings.

CUYAHOGA COUNTY MEDICAL SOCIETY.

Regular Meeting, Jan. 3, 1901.

May L. Bassett, Medical Reporter.

The meeting was called to order by the Secretary, and Dr. P. H. Sawyer was elected President *pro tem*. The minutes of the last meeting were read and approved. The Treasurer's report was read and the chair appointed Drs. Baker, Bunts and Hanson to audit same. Application for membership was made by Dr. Frank D. Simonds.

The report of the committee appointed to investigate the question of the virus used in vaccination was made by the chairman, Dr. Stuart, as follows:

"Replies have been received from Parke, Davis & Company and also from the Mulford Co., to the effect that the virus when sent out by these companies is effective, but may deteriorate from the lack of care given it after passing into the hands of dealers. The report is lengthy but will be given in full if the Society wishes to hear it." The Society voted to accept the report as given in brief.

Miscellaneous business followed and presentation of cases and specimens was called.

Correspondence.

GRADUATE NURSES' ASSOCIATION OF CLEVELAND.

Cleveland, February 21, 1901.

To the Citizens of Cleveland:

The Graduate Nurses' Association of Cleveland is making an effort to provide adequate nursing for the sick poor of Cleveland by the organization of a system of district nursing in the city.

The society is composed of women whose daily work carries them among the sick, and many of them among the poor, and who are thus in a position to know by personal experience the great need in the community for this form of nursing.

The deplorable condition of the sick poor is equally recognized by the clergymen of the city, by residents of the social settlements, and by others interested in charitable work, many of whom have expressed the hope that visiting nurses might be placed in the poor districts without delay.

All sick people cannot avail themselves of the care and comfort offered by hospitals, as for instance chronic invalids, mothers

of families and sometimes children. To these the district nurse, by her ability to bring comfort and proper care, would be of inestimable value. She would not only save the lives of many bread winners and of others necessary to the preservation of the home, but, in addition, would teach the necessity of cleanliness and the simple rules of the care for the sick.

Upon investigation it has been found that a society of district nurses exists in almost every other large city of the United States, and that in every instance much good work has been accomplished.

The experience of these societies shows that the average yearly expense for the services of one district nurse amounts to about seven hundred and fifty (\$750) dollars.

The Graduate Nurses' Association is willing and anxious to do its utmost to promote the work of district nursing in Cleveland and to procure for all nursing in sickness, but on account of the heavy financial expenditure involved in such an undertaking, is unable to move along in the matter. For this reason, and believing that the public of Cleveland is already aware of the necessity of this work and interested in its accomplishment, the Association asks for its generous assistance.

It is proposed to place the organization of the work in the hands of a board of directors composed of representative men and women of Cleveland.

Until complete organization has been accomplished, subscriptions will be received by the Treasurer of the Graduate Nurses' Association, Miss Sophia Sundberg, care of the Lakeside Hospital, or by the Secretary.

Signed on behalf of the Graduate Nurses' Association of Cleveland.

M. HELENA McMILLAN, Pres.

LAUDER SUTHERLAND, Sec.

Notes and Comments.

Dr. and Mrs. C. B. Parker left on the 28th Feb. for a trip through Mexico.

Dr. William A. Szarl announces that he has opened an office in the Rose Building for consultation in mental diseases.

Dr. A. R. Baker was in Washington, D. C., on the 20th and 21st Feb., attending a meeting of the Medical College Association.

Dr. Myron Metzenbaum, who has been associated with Dr. A. J. Cook, left on Feb. 28 for Vienna, to continue his professional studies.

Dr. Robert E. Ruedy announces his return to Cleveland and the opening of his office at 766-768 Rose building. Special attention given to mental and nervous diseases.

Dr. Charles D. Williams of the class of 1900, Western Reserve Medical College, has been appointed to the position of Resident Gynaecologist at Lakeside Hospital.

Dr. Wm. H. Weir has resigned his position as resident gynaecologist at the Lakeside Hospital, and will spend a year abroad, before returning to begin private practice in Cleveland.

Dr. Robert H. Martin, 389 Cedar avenue, announces that owing to a prolonged illness, due to a pronounced uric acid diathesis, he has decided to move to a more favorable location, and will be, after March 1st, at Mt. Clemens, Mich., where his practice will be limited to patients taking the baths.

Dr. L. B. Tuckerman went to Washington, D. C., on February 18th to attend the meeting of the legislative committee of the American Medical Association, which met there on the 20th and 21st of February. The national legislative committee and the state legislative committees will have a joint meeting to decide upon medical legislation to be recommended to congress and to the state legislatures.

Dr. T. F. Harrington (*Phila. Med. Jour.*, April 28, 1900) called attention to the occurrence of a widely dilated state of both pupils as an early sign of tuberculosis. Dr. Chmelicek Luhan, of New York (*ibid.*, May 26), confirms Dr. Harrington's observations, and adds that these dilated pupils are infallibly associated with peculiarly bright and glistening eyes, which show great susceptibility to the stimulus of light.

Dr. W. T. Corlett's work, a *Treatise on the Acute Exanthemata*, is now in the hands of the publishers, F. A. Davis & Co., of Philadelphia, and will shortly make its appearance. The book will contain four hundred and forty pages, and forty-nine full-page photogravures, among them being twelve colored plates—all representing cases which have come under the personal observation of Dr. Corlett. We hope to give the work an early review.

Dr. Joseph McFarland, of Philadelphia, the well-known bacteriologist and pathologist, and author of a text-book on bacteriology, has been engaged by Parke, Davis & Company, of Detroit, to pursue scientific research in his chosen field. It is the intention of this Company to prosecute more energetically than ever before a series of experimental researches into the etiology, the pathology, the toxic products, and the possible cures of the various infections.

Arterio sclerosis is described by M. Huchard, in his treatise on disease of the heart, as peculiarly the disease of physicians, politicians and financiers, their liability to which is largely due to their practicing professions in which emotion is often intensified and which involve great liability to overwork. In addition doctors experience unavoidable irregularities in hours, and sometimes continuous periods of work without rest. The single means of arresting and avoiding these consequences is by a diminution of anxiety and an avoidance of overwork, with measures taken as far as possible for repair of the wasted tissues.

Unna's Ointment in Ringworm of the Scalp. In the *Post-Graduate*, xv, p. 1009, Dr. T. G. Lusk, of the New York Post-Graduate Medical School and Hospital, gives credit to Unna's ointment for the quickest results in cases of ringworm of the scalp, consisting of

Chrysarobin	5 parts.
Ichthyol	3 parts.
Salicylic acid	2 parts.
Petrolatum	to 100 parts.

The ointment is to be rubbed in, spreading of the inflammation to the conjunctiva and to the face being prevented by an oiled-silk cap to the head. A soothing ointment is to follow this strong application after two or three days.

Decimal Prescribing Made Easy. The *Dietetic and Hygienic Gazette* for November cites, on the authority of the American Association for the Advancement of Science, the following lines as all that is necessary for the physician to learn in order to prescribe in the metric system:

1,000 milligrammes make one gramme.

1,000 grammes or cubic centimetres make one kilogramme or litre.

65 milligrammes make one grain.

15½ grains make one gramme.

31 grammes make one ounce, Troy.

Since the discovery of a typhus bacillus fatal to mice, pussy has been dropped from the German military establishment, and no longer enjoys her old allowance of \$4.50 per annum for food, medical care, training and badges.

Typhoid Among British Troops. A question in the British House of Commons Tuesday elicited the statement that there had been 15,625 cases of typhoid fever among the British troops in South Africa, and that of this number 3,642 proved fatal.

Metric System Coming. The bill of Representative Shafroth, of Colorado, for the adoption of the metric system by the United States, was favorably reported last week by unanimous vote of the House Committee on Coinage, Weights and Measures. The bill is changed so as to make the system go into effect January 1, 1903.

To Combine Toronto Medical Schools. Definite steps are being taken to bring about the amalgamation of Trinity Medical College, Toronto, and Toronto Medical College. Representatives of the two faculties have held a meeting in the Premier's office, Toronto, and a committee composed of three members of each faculty was appointed to draft a definite basis of amalgamation.

A Novel Use for the Plaster Bandage. A Cleveland physician, upon returnig home late one evening, discovered his cellar flooded from one of the water pipes, which had sprung a bad leak. He bethought himself of a remedy, and being of an inventive turn of mind, plugged the hole with a wooden wedge, and applied over it a plaster cast. The latter effected a complete curé, and saved a night visit from the plumber.

Transverse Positions and Turning in Primiparae. G. Vogel (*Munch. Med. Woch.*, October 9, 1900, p. 141) says that transverse positions of the fetus are very rarely met with in primiparae. Among the causes are numbered tumors, placenta previa, uterus bicornis, and scanty amniotic liquid. Among eighty-six cases of transverse position occurring at the Wurzburg clinic, eight presented in primiparae. Five of the women were affected with uterus arcuatus, one with placenta previa, and six with a flattened pelvis. As regards treatment, Vogel recommend early cephalic version by external maneuvers, and if unsuccessful combined cephalic version with perforation of the membranes. As a last resort he advises podalic version, and only in extreme cases podalic version with the hand *in utero*, provided there be no impending rupture of the uterus.

One of the thoroughly interesting side trips to be enjoyed in connection with a visit to the Pan-American Exposition will be the trip to Niagara Falls to view the wonderful installation in the big power house of the Niagara Falls Power Company. It is this station that will supply the electric energy to be used on the Exposition grounds, and an inspection of it will bring the visitor in touch with the most marvelous electrical power development of the present time.

The power house proper is a beautiful stone building nearly 500 feet long. The front section is occupied by the company's offices, and to the rear stretches the one-story section known as the dynamo room. Beneath this room there is a great slot, over 400 feet long and 179 feet deep, cut out of solid rock. It is this slot, or wheel-pit, that forms the home of the ten powerful turbines that give power to the dynamos or generators in the station. These turbines are each of 5,000 horse power capacity, and they are connected to the dynamos by a tube shaft which extends up the wheel-pit. The construction is such that the weight of the shaft and the revolving parts of the dynamos practically float upon the water that passes through the turbine. The weight of these parts is many thousand pounds, all adjusted with such nicety that there is but the least possible friction.

The water that supplies the turbines is taken from an inlet canal connected with the upper Niagara river. This canal is 1,450 feet long, 100 feet wide at the tail end and 180 feet wide at the entrance. Its normal depth of water is 12 feet. Passing from this inlet canal, the water goes into pen-stocks and is carried down the wheel-pit upon the turbines, the head being about 136 feet. After passing through the turbines and developing power, the water flows into the big tunnel tail-race. This tunnel is 6,890 feet long. It reaches from the power house to the lower Niagara river, where the stream of water that flows from it may be seen intersecting the river under the upper steel arch bridge just below Prospect Park. The tunnel passes right under the main part of the City of Niagara Falls at a depth of about 200 feet. In dimensions the tunnel is 18 feet 10 inches wide and 21 feet and $\frac{1}{4}$ inches high. Its form is that of a horseshoe and from end to end it is lined with four courses of vitrified brick in order to assure permanency.

It is this station that will be the great power house of the Pan-American Exposition. It is a magnificent spectacle to stand on the visitors' gallery in this power house and look upon the

whirling dynamos as they make 250 revolutions every minute. The average person finds it difficult to realize that these machines are generating a force that is being transmitted miles and miles away to the Exposition grounds, there to delight all within the gates by the wondrous effects created when used in any of its possible forms. How wonderful it will be to look upon the highest electric light on the top of the Electrical Tower and stop to consider that the force that gives it its remarkable brilliancy is developed by means of turbines located deep down in the big wheel-pit in Niagara Falls! The Electric Tower will be 391 feet high. The wheel-pit where the turbines are is 179 feet deep. The distance between the two is over 20 miles. Think of it!

Constant feeding is said to be the best remedy for nausea during pregnancy.

Kinnear says that cardiac palpitation, due to various causes is easily controlled in a majority of cases by the application of cold to the dorsal spine. The same cases are also benefited by inhalations of oxygen.—*Journal of Medicine and Science*.

Austin, Texas, has passed an ordinance forbidding the sale of cocaine except on a physician's prescription and also forbidding the filling of the prescription more than once.—*Journal of Medicine and Science*.

Quinin in Labor.—Fussell finds that the administration of quinin is a valuable stimulant in cases of uterine inertia, especially in cases of multiparæ. He thinks its employment will frequently obviate the use of forceps. He gives about 15 or 16 gr. at a dose.

According to Livings (*Railway Surgeon*), benign tumors that are not complicated with inflammation or infection do not produce fever. Malignant tumors that are growing rapidly, irrespective of inflammation or infection, are usually attended with fever, the temperature often ranging from 100 to 102 degrees Fahrenheit.

Miss Ward writes from Brazil that the whole country is perpetually in a state of semi-intoxication from coffee—men, women and children alike, and to babies in arms it is fed from a spoon. It is brought to your bedside the instant you are awake in the morning and just before you are expected to drop off in sleep at night, at meals and between meals. The effect is plainly apparent in trembling hands, twitching eyelids, mummy-hued skin, and a chronic state of excitability worse than that produced by whisky.

The Magnet in the Removal of Foreign Bodies from the Bronchi A striking instance of the usefulness of the electro-magnet as an aid in the removal of foreign bodies was lately reported to the Lyons Society of Surgery by M. Gouilloud. A nail two inches long had lodged in one of the intropulmonary bronchi, where it had remained for about two months. Tracheotomy was performed, and through the opening the attenuated extremity of a powerful electro-magnet was passed into the trachea. The nail was immediately caught on the magnet and removed.—*New York Medical Journal*.

Black Draught. In this, writes Lauder Brunton, there is one thing to cure by acting upon the intestinal secretion, another to help it by acting on peristalsis, another to make these act safely by lessening griping and flatus, and still another to make the compound more agreeable. The formula of the British Pharmacopœia is:

R	Magnes. sulph.....	120.0	($\frac{3}{4}$ iv)
	Fl. ext. glycyrrhiz.....	30.0	($\frac{3}{4}$ j)
	Tr. c rdam. comp.....	45.0	($\frac{3}{4}$ iss)
	Tinct. sennæ.....	75.0	($\frac{3}{4}$ iiss)
	Infus. sennæ.....	450.0	($\frac{3}{4}$ xv)

M. et sig.: One to one and a half ounces.—*Action of Medicines*.

Laryngitis and Asthmatic Paroxysm. It is now generally admitted that asthma is a vaso-motor neurosis and that the paroxysm is provoked by some peripheral irritation of the sympathetic nerve. Experience has shown W. C. Glasgow (*N. Y. Med Jour.*, August 25, 1900,) that in a majority of cases this irritation lies in the upper portion of the respiratory passages. The posterior surface of the turbinates, the interarytenoidal commissure, the posterior surface of the trachea, and the membrane at the bifurcation of the trachea have been shown to be the most sensitive areas of the respiratory tract, and it is unquestionably an irritation of one of these areas which produces the symptoms of reflex cough. The interarytenoid commissure seems to be the site most frequently affected and this can easily be treated by local applications. The constitutional treatment consists of the usual administration of potassium iodide and antispasmodics. Locally he applies carbolized iodine to the larynx and pharynx by means of a soft brush and finds it successful, partly through its anesthetic action, and also on account of its local stimulating effect.

Plaster of paris bandages are very easily removed by the following simple method: Soak some cotton wool in peroxide of hydrogen, then moisten the splint down its full length with this, for about half an inch wide. When it is thoroughly soaked the plaster will be found in the same condition as when first put on, and the bandages have only to be cut with a pair of scissors, without any injury to the patient or any trouble whatever.

The following has proved of value in dandruff and falling of the hair. Wash the head with tar soap two or three times a week and then apply the following ointment to the scalp, using gentle friction: Resorcin and quinin sulphate, of each twenty grains; tincture of cantharides and tincture of capsicum, of each one drachm, and add vaseline one ounce.—*Journal of Medicine and Science.*

The Western Ophthalmologic and Oto-Laryngologic Association will meet in its next annual session in Cincinnati, Ohio, April 11th and 12th. A fine program has been arranged and the medical profession are cordially invited to attend the sessions. Dr. C. R. Holmes, of Cincinnati, is chairman of the local committee of arrangements. Dr. M. A. Goldstein, of St. Louis, is the president, and Dr. W. L. Ballenger, of Chicago, is the secretary.

The national encampment of the Grand Army of the Republic will be held this year at Cleveland, Ohio, a comparatively short distance from Buffalo and the Pan-American Exposition. The transportation facilities between Cleveland and Buffalo, by land and water, are of the best, the distance being covered in a few hours. In view of the nearness of the encampment to the Exposition and the quickness with which the trip may be made, it is safe to venture the statement that practically all of those who journey to Cleveland will make the side trip to Buffalo.

For Facial Erysipelas. *Riforma medica* for November 28, 1899, gives the following:

R	Pure carbolic acid.....	from 15 to	75 grains;
	Tincture of iodine	from 15 to	45 grains;
	Alcohol	from 75 to	150 grains;
	Oil of turpentine.....	from 225 to	300 grains;
	Glycerin		1,200 grains.

M.

The affected surface to be painted therewith every two or three hours and covered with antiseptic gauze.

The Union Medical Association of Northeastern Ohio met at Akron on February 12th. This being the annual meeting, officers were elected and standing committees appointed as follows:

President—Dr. G. L. Starr, Hudson.

First Vice-President—Dr. Geo. S. Peck, Youngstown.

Second Vice-President—Dr. A. E. Foltz, Akron.

Recording Secretary—Dr. J. H. Seiler, Akron (re-elected).

Corresponding Secretary—Dr. C. W. Milliken, Akron.

Treasurer—Dr. H. H. Jacobs, Akron (re-elected).

STANDING COMMITTEES

Admission—Dr. H. C. Theiss, Akron; Dr. D. W. Gans, Massillon; Dr. D. H. McMillen, Orrville.

Ethics—Dr. D. B. Smith, Cleveland; Dr. James Fraunfelter, Canton; Dr. N. B. Dawson, Sterling.

Finance—Dr. E. P. Morrow, Canton; Dr. C. T. Hill, Akron; Dr. M. J. Lichty, Alliance.

Obituary—Dr. N. S. Everhard, Wadsworth; Dr. W. E. Wirt, Cleveland; Dr. S. J. Wright, Akron.

Publication—Dr. Edward Lauder, Cleveland; Dr. E. A. Tobias, Inland; Dr. G. E. Gardner, Doylestown.

The next regular meeting will be held in Canton on the second Tuesday (the 14th) in May. The program for that meeting is as follows:

Lecture—Dr. T. Clarke Miller, Massillon.

Lecture—Dr. C. A. Hamann, Cleveland.

Essay—Dr. D. S. Bowman, Akron.

Essay—Dr. H. S. Upson, Cleveland.

Discussion—Dr. H. Blankenhorn, Orrville.

Poem—Dr. A. E. Foltz, Akron.

Reports of Cases—Dr. J. H. Todd, Wooster; Dr. C. H. Goodrich, Sandyville; Dr. J. P. DeWitt, Canton; Dr. J. H. Stoll, Wooster; Dr. A. G. Campbell, East Greenville; Dr. J. T. Gardner, W. Brookfield.

Terry McGovern, also known as "Terrible Terry," the strongest boy boxer in the world, has written a boys' story for *New Golden Hours* entitled the "Bowery After Dark; or, In Pursuit of New York's Greatest Criminal." This is a true story of detective life in the great metropolis.

A FREE sample of No. 672, containing the opening chapters of "Teddy Roosevelt's Protege," or No. 677, with the opening chapters of the "Bowery After Dark," will be sent upon application. Munro's Publishing House, 24 and 26 Vandewater Street, New York.

It is estimated that during the first five years of this century the enormous sum of \$100,000,000 will be expended by purchasers of automobiles. It remains to be seen, if the prophecy comes true, what style of vehicle will secure the bulk of the business. At the Pan-American Exposition all styles of automobiles will be exhibited, and then we may be in better position to judge of the respective merits of the various makes and methods of operation.

Prize Essay on the Dangers from Quackery.—The Colorado State Medical Society offers a prize of twenty-five dollars for the best essay, if deemed worthy of the prize, pointing out the dangers to public health and morals, especially to young persons, from quackery as promulgated by public advertisements. The competition is open to all. Essays must be typewritten in the English language, and submitted before May 15th, 1901. Each essay must be designated by a motto; and accompanied by a sealed envelope, bearing the same motto, and enclosing the name and address of the author. The essay receiving the prize will become the property of the society for publication. Others will be returned on application. Essays should be sent to the Literature Committee, Room 315 McPhee Building, Denver, Colorado.

Typhoid Fever at Galveston. Galveston is reported to be threatened with an epidemic of typhoid fever. There is a great deal of sickness prevalent in the city and physicians say that the majority of patients have developed typhoid symptoms. A number of cases have occurred among persons living on the waterfront. There are twenty-one cases now under treatment in St. Mary's infirmary and seven at the Sealey hospital, and more would be at the hospital if rooms could be obtained. The outbreak and spread of the disease are due to the unsanitary condition of the city, and the impurity of the cistern water, the only means of supply for many families. Many persons are crowded together in buildings and tents that barely protect them from the inclemencies of the weather.—*Medical News*.

A Valuable Hypnotic. Every progressive physician recognizes the necessity of overcoming the insomnia attending certain diseases. At this season of the year, when pneumonia is so prevalent, probably nothing will so satisfactorily relieve the distressing symptoms of sleeplessness as Bromidia. By the use of this reliable preparation we can obviate the effects of losing sleep, and at the same time feel that the heart's action is unimpaired, a dire calamity in a pneumonic process.—*Vermont Medical Monthly*.

Ether Refrigeration in Strangulated Hernia. At a recent meeting of the Paris Academy of Medicine (*Journal des praticiens*, November 10th) Fiessinger mentioned a number of cases in which the prolonged topical use of ether had resulted in the spontaneous reduction of strangulated hernia. A compress moistened with ether was applied over the hernia and kept moist with ether dropped on to it. The reduction took place suddenly, and was sometimes accompanied by a cry of pain from the patient, followed immediately by a declaration of relief. The amount of ether employed was occasionally as much as half a pint, and the duration of its use varied from fifteen minutes to two hours.

Professional Secrecy and Suits to Recover for Services. An interesting ruling has recently been made by a judge of the Supreme Court of the county of Kings, to the effect that, even when suing to recover fees for professional services, a physician must not testify as to the nature of the ailment from which the patient was suffering—that is to say, on the objection of the defendant's attorney, he excluded the testimony, but, on the plaintiff's attorney's contention that such exclusion would establish a precedent preventing professional men from obtaining just dues for their services, he directed the plaintiff's attorney to hand in a brief on the law point raised, so that the question might be finally settled.—*N. Y. Medical Journal*.

Treatment of Parenchymatous Nephritis with Methylene Blue. Neistab (Yezhenedelnik, St. Petersburg) applied methylene blue in four children of scarlatinoid nephritis, and all recovered. In two cases it was combined with diuretics, in a third case with euchinin, because of malaria being present; in the fourth case with fluid extract of Canada statice (*Armeria*). The action of methylene blue the author explains in two ways. Either it enters in chemical combination with the cellular elements of the kidneys and re-establishes in the tissue of the kidneys the ability to resist the pathogenic micro-organisms; or it enters in combination with the toxins formed by the micro-organisms, rendering them neutral, and indirectly paralyzing their pathogenic action on the kidney tissues.

An extension for the Yale Medical School. Property at New Haven has been secured as a new site for the Yale Medical School. The total cost is about \$60,000, and considerable progress has been made toward securing funds for the projected structure.

Means of Resuscitation.—Traction on the tongue is not perfectly free from all danger, at least I can not see why muscle bundles should not be torn in the manipulation. By tickling the epiglottis, nothing can be injured; in intra-laryngeal operations, even after thorough cocainization, we are afraid of the reflex caused by the least sensation of tickling. Ought we not to learn from this? It might, perhaps, be tried as a means of resuscitation.—*Freudenthal, British Dental Journal.*

Acute Aortitis—Gilman Thompson advises absolute rest, ice-bag over aorta, aconite and opium, and the inhalation of four or five drop of ethyl iodide to control dyspnea.—*Practical Medicine.*

Roentgen Rays in Carcinoma.—Stenbedt (Mitttherlengen A. I. Genz. der Med. Chir.) reports a case of *ulcus rodens* in which the Roentgen Rays were used and produced a complete cure. All traces of the neoplasm disappeared after thirty-five applications of the ray. The patient, a woman 72 years old, had been suffering from an *ulcus rodens*, which had been developing on her nose for ten years.

Discovery of the Statue of Aesculapius in the Roman Forum.--The Roman correspondent of the *Lancet* for December 15th states that among the recent interesting finds in the Roman Forum is a statue of Æsculapius. It was lying face downward under the central niche of the large arched space surrounding the Well of Juturna, which has lately been excavated under the direction of Professor Boni. The head of the figure and the middle of the right arm are wanting, but the other parts are well preserved. It represents the god with a *volumen* (or roll of paper or parchment on a stick) in the left hand, leaning on his staff, round which is coiled the serpent, the symbol of prudence and renovation. Close to the staff is a child, supposed to be Camillus or Telesphorus, the genius of recovery, in the act of bringing the offering of a cock in his left hand and holding in his right hand a small knife with a pointed blade. The well enjoyed a reputation for the salubrity of its water, and this fact explains, no doubt, the presence in its precincts of the statue of the god of medicine, under whose special protection such wells were placed. The worship of Æsculapius is said to have been introduced into Rome from Epidaurus about 293 B. C., but this statue, which is of different workmanship, belongs to a much later period, probably in the first or second century of the Christian Era.

Counter-Irritants.

The Fine Old Irish Surgeon.

There was a fine old Irish surgeon, from Erin's emerald isle,
Who dashed around in a spanking double-team in the biggest
kind of style:

His reputation as an operator extended far and wide,
And patients by the hundred flocked to see him in an ever-swelling
tide,

This fine old Irish surgeon, from Erin's emerald isle.

This fine old Irish surgeon was a man of wondrous guile,
Who by the practice of surgery and sundry other arts had managed to accumulate quite a respectable little pile;
He had a perfect mania for operating, and a fee he never missed;
For sufficient pecuniary consideration he'd tackle anything on
God's green earth, from a bone fellow to a four-hundred-pound firmly adherent multilocular ovarian cyst,—
This fine old Irish surgeon, from Erin's emerald isle.

This fine old Irish surgeon, his leisure to beguile,
Would tell the darndest, toughest, most highly-improbable, Mun-
chausen-like surgical yarns and never crack a smile;
He didn't care a continental for his patient's souls,—that was
none of his business; for their bodies he cared still less,
And although most of his patients died on the operating table,
and the others, immediately after being removed, he'd claim
with more truth than poetry that every operation was a
"bloody, big success,"
This fine old Irish surgeon, from Erin's emerald isle.

One day there came a woman whose baby, she related,
In consequence of a grain of corn firmly impacted in the trachea,
was well nigh asphyxiated;
Och, Doctor, dear, it's dead he is, as sure as ye's are born,
Unless be the holy mother ye's can extricate the murtherin' grain
of corn,

Ye's fine old Irish surgeon, from Erin's emerald isle.
Be aisy, now, the doctor said, and never ye's moind a whinnet;
A sample of me wondrous skill I'll show ye's in a minit,—
Tracheotomy I'll perform, the sixteenth case today (moind that,
now),

And be the holy powers, while ye wait, that same pesky little grain of corn I'll quickly bring away,
Said this fine old Irish surgeon, in his grandiloquent style.

The baby then he quickly took,—now in *articulo mortis*,
And laid it on the operating table; then just as quickly brought his Instruments, and cutting down, through one tissue, then another,
he did not stop till he had opened the trachea, *secundem artem*, and with a pair of Gross' latest improved alligator forceps seized the offending foreign body and hastened in triumph to show it to the anxious waiting mother,
This fine old Irish surgeon, from Erin's emerald isle.

Och, madam, dear, here's the grain of corn,—I got it, you just bet!
Faith, it's meself's the man to do the thing to which me hand is set!

The *baby*? Oh, the baby,—(I think it was, ye said?)—
I got the murtherin's grain o' corn; I did,—but the *baby*, marm, is dead,

Said this fine old Irish surgeon, with his most complacent smile.
—*Texas Med. Journal.*

Parental Relations.

One of the teachers in the Sunday school of the First Methodist Episcopal church of Germantown was endeavoring to instill into the little girls of her class recently a due appreciation of parental affection. She spoke of the mother's love for her children and of the respect which the children should show to the mother. For some reason she rather omitted to lay as much stress upon the father. Finally one of the little girls remarked that she thought children should love their mothers much more than their fathers.

"Why do you think that?" asked the teacher.

"Oh, well," said the little tot, "your fathers are only related to you by marriage, but your mothers are related to you by born-ation!"—*Philadelphia Record.*

Mamma—What are you to be when you are a man, my son?

Little Four-Year-Old, of Jay, Maine, who's uncle is a physician and weighs 275 pounds—Guess I'll be a doctor if my belly is big enough.

THE Cleveland Medical Gazette

APRIL, 1901.

Original Articles.

NEPHRITIS AND THE NERVOUS SYSTEM.

BY HENRY S. UPSON, M. D.

Professor of Neurology, Medical Department, Western Reserve University,
etc.

The subject assigned to me by your president, "Nephritis and the Nervous System," is, so far as the causation of nerve-disturbances by inflammation of the kidneys is concerned, comprehended in the study of uremia. The name was doubtless given when these symptoms were thought due to the main end-product of metabolism, urea. We now know that other poisons, known and unknown, are more important in the production of the headache, coma, delirium, convulsions, even hemi- and monoplegias and disorders of sensation that are so often important and alarming accompaniments of nephritis in its marked and advanced stages. There are, however, interactions between the kidneys and the nervous system which are somewhat broader and more complicated than are the more familiar uremic manifestations. The relationship between the kidneys and the nervous system is exceedingly complex. It is mainly comprised in their joint-stock interest in the blood-vessels, which, as carriers of nourishment to the brain and poisons to the kidneys, may be converted into carriers of nourishment to the kidneys and poisons to the brain, with somewhat disastrous results. One of the most striking facts in regard to nephritis is the amount of damage which may accrue to the kidney without any signals of distress whatever on the part of the nervous system. An equally striking fact is the amount of poisons which may circulate in the blood and damage the nervous system, with kidneys quite intact. The explanation seems to lie in the

fact that the kidneys readily carry off some poisons, while others seldom, if ever, leave the body in the urine, but are gradually thrown out into the stomach and vomited, into the intestines and passed with the feces, into the saliva and are spit out, into the skin, and leave with the sweat. These facts complicate the simple relation which would be presented if the kidney were the only point of exit of poisons, and if it were only a question of whether the sluice-gate were open or shut to toxic substances either normal or abnormal. In spite of these facts, which determine for the kidney a distinctly secondary place in the importance of its action on the nervous system, and the frequency with which it is a bodily factor in the production of obscure nervous conditions, it is true that nephritis may at times produce almost all if not all of the symptoms considered indicative of organic brain-lesion, and may closely simulate in its symptoms many functional nerve troubles.

Nervous symptoms set up by nephritis may be divided into the irritative and the paralytic, and symptoms belonging to each of the groups may be caused in either of two ways; by retained poisons, or by pressure, either increased blood pressure or the pressure of extravasated fluids. It is not always either possible or necessary to distinguish between these two modes of causation, and at any rate they resolve themselves ultimately into one, the toxic theory, as, even if we suppose that many symptoms are mechanic, coming by way of effusion of serum, and this pressure on the nerve elements, or the result of vascular fibrosis and thus ischemia of nerve centers, the strong present tendency is to refer such vascular changes back to the action of poisons. The keynote of the problem is thus after all to be sought in the origin of the poisons which set up arterial and kidney changes alike.

Regarding the vascular irregularity and changes in structure in the nerve-tissues as the expression of the actions of poisons circulating in the blood, two points are of great importance, to determine, first, what these poisons are, and second, their origin, especially whether they are due to bacterial action or to faulty metabolism. These two questions are clean cut enough in statement, but are very complex and difficult, and our knowledge of them is in its infancy, so that at this time hardly more is possible than the statement of what it is especially important to find out by experiment, with some surmises as to the probable actions of some of the better known poisons. Of these we may briefly consider (1) urea, (2) uric acid, (3) the so-called alloxuric bodies, (4) the ethereal sulphates. Of these, so little is known of the allox-

uric bodies that it is hardly possible to discuss them in this paper. In regard to urea, it is, according to Herter's investigations, the probable cause of the diarrhoea and vomiting which are so marked in some uremic patients. It is to be noted that urea is not increased in the blood in many cases of uremia, so that many uremic symptoms must be due to other poisons. Deficient elimination of urea plays no part so far as is known in any nerve disturbances apart from well-marked uremic states.

Much more important from this point of view are the ethereal sulphates, indol, skatol, phenol, cresol, etc. These sulphates are products of decomposition and it has been proved that in man, in the absence of suppuration, they vary directly with the decomposition of the intestinal contents. They are excreted by the kidneys and may be estimated quantitatively in the urine. There is no doubt that intestinal putrefaction sets up marked nervous symptoms. Clinical evidence is strong that this is so. Efforts have been made to connect the presence of ethereal sulphates in the urine with especial nervous diseases, especially such functional conditions as epilepsy, constipation being a known exciting cause of the epileptic paroxysm, and chorea, in whose causation digestive disturbances often play a prominent part. The ethereal sulphates are often increased in the urine before the epileptic convulsion, and this is an important confirmation of the clinical fact already noted, but our therapeutic resources are not thereby increased. Even the question whether these sulphates are themselves poisons has not been answered. The analogy of what little is known in regard to uric acid suggests the possibility that the sulphates may be simply the index of a putrefaction which liberates unknown poisons, and that these latter, varying in different cases, are the cause of nerve disturbances commonly known as functional.

The subject of uric acid in the blood and the urine, its relationship with arterio-sclerosis and nephritis on the one hand, and with gout, rheumatism, coryza and nerve disturbances on the other, is an especially important, and, in its present stage, a very tantalizing one. The man who has written on this subject in the fullest, most practical, most interesting and probably least scientific way is Alexander Haig, of London. He retains the now somewhat antiquated notion of the uric acid diathesis. His theory is, in brief, that uric acid in excess in the blood is responsible for migraine, epilepsy, chorea, fatigue, gout, rheumatism and many other ills. He makes the whole thing a matter of solubility thus:

When the blood is more alkaline uric acid is more soluble in it. It exists in it therefore in increased amount. When it is less alkaline the uric acid is stored in the tissues. When the blood becomes more alkaline again, the acid is set free in the blood in undue amount, and poison-symptoms such as headache, etc., ensue until the excess is once more eliminated.

We may say of Haig's work that headaches and neurasthenic symptoms in general are often associated with fluctuations in the uric acid contents of the urine, but, as Herter points out, that these fluctuations are due to uric acid stored in and then liberated from the tissues by varying alkalinity, is quite unproved. It is more probable that they are due to variations in uric acid production. That uric acid has any causal relation with epilepsy as a disease is quite unproved, and it is improbable that in most cases it is even an exciting cause of the attacks. The very basis of Haig's enthusiasm, the fact that increased uric acid excretion is a feature of so many functional and organic diseases, is a reason for regarding uric acid as probably not the direct cause of these conditions, but more probably as an index and the result of cell destruction which occurs as a feature of disease of widely different kinds.

Interesting as are these insufficiently supported views of Haig, some known facts suggest strongly the view that uric acid is not responsible for any of the conditions studied by Haig but that it is an end-product representing different substances in the blood, and that some of these substances may be poisons, causing headaches and other ills, others may be simply the product of cell disintegration and be comparatively harmless. One most significant fact is that in leukemia, with an enormous increase of white cells in the blood, there is a marked increase of uric acid in both the blood and urine, but headaches, epileptic convulsions and choreic movements are not common symptoms in leukemia. On the other hand, Herter finds that uric acid apparently plays no part in the major epileptic attacks, although apparently the minor ones may be decreased in number by milk diet, with its consequent decrease of uric acid formation.

The way in which cell destruction is at some times conservative and at other times disastrous is not well known, but a provisional theory* has been formulated in regard to some forms of gout, rheumatism and neuralgia, diseases especially connected with kidney lesions. It brings in, in an interesting way, what is known in regard to leucocytosis.

*Progressive Medicine, December, 1899.

Leucocytes exist in the blood in increased number after the ingestion of certain kinds of foods, especially proteids. Inflammations caused by many micro-organisms, as in influenza, ordinary colds, gonorrhea, are associated with leucocytosis, which is more marked when the white blood-cells are successful in their fight with the germs. Regarding rheumatism, gout and neuralgia as diseases associated with an undue amount of uric acid in the blood, and uric acid as a product of leucocytes, it follows that we would expect rheumatic and neuralgic attacks to occur during that time of the year when those diseases are prevalent which are associated with leucocytosis. It is a striking fact that just these diseases, bronchitis, tonsillitis and influenza are prevalent during the winter when rheumatism and neuralgia are most in evidence. On the contrary, intestinal disorders, which occur mainly in the summer, are not associated with leucocytosis. We know, too, that in many instances, and strikingly so in gonorrhea, the local manifestations cease at the time of incidence of the rheumatism. This may simply mean that the leucocytes are increased in the blood at the time when they are most successful locally. We would expect the poisons which cause nerve-disturbances, neurasthenic symptoms, neuralgias, and gout and rheumatism as well to affect the kidneys as they pass through it by excretion. Statistics show that as a matter of fact inflammation of the kidneys begins to increase in October, a month later than the beginning of the increase of rheumatism. It continues to increase until the month of May, one month after rheumatism has decreased in frequency, so that apparently kidney inflammation may often form one more link in the vicious circle which begins with a common cold.

To recapitulate, while urea does not often, so far as we know, affect the nervous system, while the ethereal sulphates do affect the nervous system, but probably do not injuriously affect the kidney, and while the alloxuric bodies may possibly affect both, uric acid is the substance which, appearing in the urine, seems to be in close relation with nervous diseases, especially functional ones, on the one hand, and with organic kidney diseases on the other. We now know that this relationship is a complicated one, and that most of its problems are still to be either solved or confirmed.

ETIOLOGY OF CHRONIC NON-EXUDATIVE
NEPHRITIS.

BY S. L. BERNSTEIN, M. D.

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The etiology of chronic interstitial nephritis is often quite obscure. It may follow an acute diffuse nephritis of scarlet fever or pregnancy, or chronic parenchymatous nephritis when it is known as secondarily contracted kidney. As a primary affection, however, it is more frequent. Males are more subject to it, as they are more prone to the invasions of the etiological factors.

Age, under 25 years, rare; till 40 a few well-marked cases, and between 40 and 60 years, common. Heredity is a causative factor in some of the cases.

Exposure to dampness and extreme cold is often the cause. Purdy regards the moist regions of the Northwestern States as especially favorable to the disease.

Chronic malaria and syphilis are often etiological factors. Lead poisoning is a frequent cause, through the influence of lead salts upon the blood vessels. Dickinson reports 26 cases in 42 workmen among lead, and M. Jacob in 12 cases of chronic nephritis, eight were workmen in lead.

Habitual drinking large quantities of alcoholic stimulants is the most important causative agent. Alcohol has the same effect upon the parenchyma and interstitial tissues of the kidneys as in the liver. Some authorities claim that not alcohol but the surroundings of chronic alcoholism, viz., undue exposure, lowered vitality, etc., are the factors at work. Gout, according to Tod, is a common cause. In England, the classical home of gout, it is so often and so predominate over other factors that the name of gouty kidney given to it by Tod is synonymous with chronic interstitial nephritis. According to Croftan, the alloxuric bases are the primary factors of "gouty kidney."

As to arterio-sclerosis, three things are to be considered:

Firstly, arterio-sclerosis may be primary, the induration and atrophy of the kidneys secondary, a "true sclerosis of the kidney."

Secondly, as a result of the irritative causes the nephritis is primary and hypertrophy of the heart and arterio-sclerosis secondary. And,

Thirdly, both conditions, viz., nephritis and arterio-sclerosis, may be caused simultaneously by the same toxins.

According to Lanceraux, chronic diseases of the urinary passages may cause contracted kidney, *e. g.*, urethral strictures with

its sequelæ, cystitis and pyelitis and renal calculus, also stricture of ureters. Prolonged suppurative processes are apt to be followed by chronic nephritis. Strumpell states that acute articular rheumatism is often followed by chronic nephritis.

Mental worry, over-eating and lack of proper exercise so common with the hustle and bustle of business in this country, are often etiological factors.

Chronic nephritis is often associated and caused by diabetes mellitus.

Lastly, Senator states that it was reported as a congenital affection by Weigert.

PROGNOSIS IN CHRONIC NON-EXUDATIVE NEPHRITIS.

BY NORMAN C. YARIAN, M. D.

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In considering the prognosis of this disease we must bear in mind the facts considered under its pathology, hygiene and treatment.

From the nature of its pathology we should not look for a complete recovery. The fibrous changes once having occurred are at least permanent if not, as usual, progressive.

The changes which occur within the kidney substance are such as to gradually disable successive portions of the secreting elements. This process is usually slow and therefore under proper hygiene and treatment the disease is not incompatible with the enjoyment of a fair degree of health and activity for a number of years. Much depends upon the hygiene, habits, general constitution and a well regulated life, free from all excesses.

Osler says that "Increased arterial tension, thickening of the arterial walls and polyuria with a small quantity of albumin neither doom a man to death within a short time nor necessarily interfere with the pursuits of an active life so long as proper care is taken. Cases are on record where these symptoms with hyaline casts have been present for ten, twelve or fifteen years. Loomis speaks of one case yet living who has had the disease fourteen years. Eight to ten years is not an uncommon duration and the average is said to be three to five years. So long as the heart compensates there are likely to be no distressing symptoms, but with its failure there comes dyspnœa, œdema and uræmia. These are at first amenable to treatment, but later all remedies fail to sup-

port the over-worked heart muscle and what little kidney substance still remains.

Cheyne-Stokes respiration, persistent vomiting, delirium, severe dropsy, and finally death by either coma, convulsions, or gradual failure of circulation ends the struggle on the part of nature to compensate for an irreparable destruction of kidney substance and degeneration of the vascular walls.

TREATMENT OF CHRONIC NON-EXUDATIVE NEPHRITIS.

BY J. B. MCGEE, M. D.

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The treatment of non-exudative nephritis is essentially symptomatic in character. While a cure, however, is out of the question, as no agent will restore the degenerated structures nor wholly check the characteristic changes, medical means may retard the rapidity of its course, relieve the serious symptoms, and possibly avert the dangerous complications so liable to ensue. The most we can hope for then is to render the patient comfortable and to lengthen life, and the important indications in a remedial way are to avoid excess and exposure, to reduce vascular tension, and to sustain the heart when it begins to fail. Extreme mental and physical effort should be avoided, alcoholic drinks and nitrogenous foods used sparingly, if at all, while attention to clothing, warmth and secretions would seem imperative. The diet requires careful consideration, and while milk in some form is almost universally advised, its use exclusively is now seldom insisted on; on the other hand, a full diet we know increases tension, with the added risks which such an increase implies, and a mixed diet, largely milk, and adapted to the special case, is to be preferred, the general condition of the patient being the best index to follow.

The condition of the circulatory system is perhaps as important as that of the kidney, as the vascular changes incident to the disease form a factor requiring attention, while relief to the symptoms dependent on them contributes greatly to the patient's comfort, and as long as a good circulation is maintained, the risk of uræmia is greatly lessened. In the earlier stages a rapid pulse of high tension is an index of commencing cardiac change, and with an excess of hypertrophy a cardiac sedative is needed, and at this time veratrum viside, with its well-known power of lowering tension as well as quieting cardiac action, will often be of value. As

there is a definite relation existing between the high tension and many of the conditions present, its lowering is a prime indication for the relief of the series of symptoms sequential to this vascular change, and nitroglycerin, with its prompt power as a vaso-dilator, is probably the general favorite of the profession for this purpose; an increase of pressure within a weakened vessel means possible rupture, and no other agent is so valuable in these cases as well as when the renal lesion is the local expression of a general endarteritis. It is stated that a tolerance is established for the drug in this disease and its dose should be gradually increased, but it is generally well borne and some patients will take with benefit relatively large doses. As it is a drug which is eliminated rapidly, it should be given at short intervals to maintain its effect, and it should be dropped for a few days every few weeks, resumed in a small dose and this increased till the effect desired is obtained. The iodides too exert a favorable action and probably lessen tension, and may be used when we desire to discontinue the nitroglycerine for a time. While compensation is complete, no active cardiac treatment is indicated, but in the later stages of the disease the heart muscle is apt to become weakened by the action of the toxins in the blood, the anæmia and the extra work imposed upon it in overcoming the increased resistance due to arterial change. Under the strain it may be unequal to its task, and when evidence of deficient compensation occurs digitalis and its allies are indispensable.

Although digitalis is of especial value when tension is low and generally contraindicated when it is high, yet union with nitroglycerine will counteract its tendency to contract the vessels, aid its heart action by lessening resistance, and increase diuresis. The objection has been advanced that the effect of the nitroglycerine is largely lost before that of digitalis is expended, but practically the combination is an efficient one. Spartein and strophanthus are of value and neither appreciably increase tension, while caffeine, theobromin and strychnine may at times be useful as supplements or substitutes. The symptoms which at times demand active aid are anæmia, uræmia and dropsy. Although anæmia is neither so decided nor so frequent as in the exudative form of the disease, yet, when existing, here as elsewhere iron is essential, and there is some difference of opinion as to which preparation to employ. It is now generally asserted that the organic forms of iron are alone absorbed, and while they frequently act well, yet we know that clinically certain cases improve under inorganic treat-

ment, and in this form of anæmia I have found the tincture of the chloride, although rather disagreeable to take, still one of the best of chalybeates; given in small doses and combined with about 1-100 gr. of the bichloride of mercury three times a day, it rarely fails to be of aid; it improves the weak heart's nutritive supply and the mercurial doubtless enhances its beneficial influence. We should remember, however, that whatever form of iron is chosen is simply of value for the anæmia, and if given when this is absent, it may do harm. Iron is so generally recommended in chronic nephritis that the inference might be drawn that it benefits the existing inflammation, while we know it controls only the anæmic condition and does not influence the renal changes.

One of the great dangers is uræmia, and coma rather than convulsions is here its more common form of expression. General means may avert it to a great extent, and in mild cases free purgation, and water taken freely may relieve it, ensuring the excretion of the toxins presumably present; in fact, elimination in some form is the essential in any method of treatment. In severe cases prompt purgation, and, if the heart be strong, pilocarpin hypodermatically, are usually efficient. The present trend of professional testimony, however, is largely in favor of the saline solution, used intravenously, perhaps with previous venesection if the case be urgent, or if more time be allowable hypodermoclysis, if the tissues are not so œdematous as to interfere with absorption, when enteroclysis may be employed. Its method of action is, of course, evident, depending on dilution of toxins in the blood and rapid renal elimination, and, as no other agent promises better results, it appears at present to be the remedy of choice.

Dropsy occurs in the later stages and requires purgation and diuretics, with support to the weakened cardiac muscle until, if possible, compensation is restored. Ascites, which is sometimes met, is generally due to coincident hepatic cirrhosis, and calomel especially is a most efficient aid. Like digitalis, its diuretic action seems largely to cease when dropsy disappears, but it is still valuable by increasing secretion and its effect on the circulatory system. Personally, I use the calomel during the general dropsical condition, and later the bichloride, either alone or as an adjunct to the iron when this is indicated. As to the manner in which calomel produces diuresis, it has generally been ascribed to its direct action on the renal tubules, but another plausible theory appears to be that it increases the excretion of urea, and urea we know is one of the best of diuretics. The apocynum connabinum, or

black Indian hemp, is an agent that has frequently yielded me satisfaction, and the time-honored and very efficient combination of digitalis, calomel and squill has strong advocates even to-day.

A possible risk in the use of opium or its derivatives in these cases certainly exists, and, although high authority occasionally recommends it, in my opinion the older position of regarding its use as dangerous is the safer one, and I give it tentatively and in small doses, if at all. We occasionally find these cases complicated with a diarrhœa, and it is a question whether it should be suddenly checked; it is often an effort at elimination, and its rapid cessation by opium or astringents might impose on the impaired kidneys an added strain, and if unequal to the demand, serious results might follow.

SPONTANEOUS FRACTURE OF THE HUMERUS DUE TO SARCOMA, WITH HISTORY OF A CASE AND PRESENTATION OF SPECIMEN.*

BY H. W. QUIRK, M. D., CLEVELAND.

The history of the case which I shall read you to-night will be supplemented by a clinical report by Dr. Williams, House Surgeon to the City Hospital. I also acknowledge a favor by Dr. J. R. Moore, former pathologist to the hospital, who made the autopsy and prepared the slides under the microscope here presented. I wish also to thank Drs. Nuss and Richards for this photograph, which was taken about three weeks before death.

E. S., age 31 years, a native of Switzerland; a baker by trade; always worked very hard, performing labor which has since required two men to do. He always drank to excess. Family history good. Never had any specific disease, although he gave a somewhat suspicious history of a rash all over his body nine years previous, which he said was due to getting his face poisoned by a barber. He gave no other evidence of the disease and I am of the opinion he never had syphilis. He had an enlarged thyroid, which he said he had had from childhood. Presented himself to me September 22d, 1899, having a compound comminuted fracture, with considerable laceration of the soft parts, of the ring finger of the right hand, due to getting it crushed between two boxes. By November 17th his finger had healed, after some suppuration. On December 27th, 1899, I was again called to see him. Two days previous he had made a violent swing of his left arm, the arm

* Read before the Cuyahoga County Medical Society, February 7, 1901,

striking nothing, when he and others present heard it snap. He felt considerable pain in the arm and a physician was called. He was told that there was no fracture, but that it was a bad sprain. He was placed in bed, his arm placed upon a pillow and a liniment applied. He was in this position with the arm very badly swollen when I saw him two days later. There was a nearly transverse fracture of the humerus near the insertion of the deltoid muscle, free mobility and distinct crepitus. I thought that the bone was somewhat enlarged, but there was so much swelling of the soft parts that this could not be determined accurately at the time. The arm was placed in a temporary splint, which was removed from time to time as the swelling receded. At this time I also noticed a hard, elastic, round swelling, the size of a large hickory nut, on left temporal bone which was quite painful. It was located just above and in front of the ear and firmly attached to the bone and appeared to spring from it. The thyroid also appeared a little more nodular and larger than when last seen and he appeared to have lost some in flesh. His digestion was good, and his urine was normal. A sarcoma was suspected and the patient told the probable nature of the disease. However, as he had given a history of a peculiar rash years before, referred to above, he was put upon anti-syphilitic treatment with the possibility that the diagnosis of sarcoma might be a mistake, and effects of treatment noted. No apparent cessation of the steady growth was observed and the treatment was soon abandoned. The swelling in soft parts gradually receded, but the thickening at seat of fracture was greatly in excess of normal callus, and on January 15th, 1900, a plaster cast was placed on the arm. This was removed on February 7th, and there was union sufficient to enable him to use the arm to carry a pail of water, and to hold nails with that hand to be driven by the other. There was considerable unnatural thickening of the bone at seat of injury, and the humerus appeared a trifle longer than its fellow.

On March 26th he fell upon the arm, and it fractured easily at site of original injury. It at once began to grow rapidly, was quite vascular, and showed no signs of union. The peculiar crackling sound could be elicited by light pressure. The growth upon the head had steadily grown larger, as had the thyroid shown signs of nodular enlargement. He was advised to have the arm amputated at the shoulder and the growth upon the skull excised, but he refused to have it done. The growths continued to grow quite rapidly and soon there was unmistakable involvement



of not only the thyroid, but metastasis in medi-astinal glands. A disagreeable cough developed, muco- and mucopurulent expectoration, and on several occasions hemoptysis. Respiration was labored and a suffocated feeling complained of. Tachycardia was marked, at one notation it reached 150. The temperature varied, but was usually two or three degrees above normal. Percussion disclosed dullness over mediastinal glands.

About this time he commenced to complain of severe pain in left pelvis, radiating down the thigh and into the hip, and motion of the limb was limited, probably, in part at least, due to the increased pain on motion. About this time, June 12th, he was admitted to the City Hospital, where he died of asthenia July 31, 1900. At the autopsy metastases were found in many organs, a deposit the size of a hen's egg in liver, and many in thoracic and abdominal cavities, a growth as large as one's closed hand on inner side of left innominate bone and one of less size upon left femur.

I hereby append an abstract of Dr. Williams' report at the time he entered the hospital: "Thorax symmetrical; excursion equal on both sides; lungs' boundaries normal. Marked dullness and resistance over sternum extending a finger's breadth to either side. Breath sounds diminished on left side. Scattered areas of broncophony and tubular breathing throughout both lungs. Heart boundaries normal. All sound accentuated, pulmonic second sound markedly so. One inch to left of pulmonic area a soft systolic murmur is heard. Pulse rate 110, regular, rhythmical. Glandular system shows general enlargement. Sight not impaired in either eye. July 15th, noted a soft mass half the size of one's closed hand over left ischial tuberosity."

An abstract of Dr. J. Ran Moore's autopsy and histologic report is as follows: "Thyroid gland cystic and degenerated, about as large as a fist. Mediastinal glands enlarged and hard. The whole mediastinum is a mass of glands and tissue, firmly matted together. White glistening raised patches and well defined nodules are scattered over both surfaces of the diaphragm, two of which have an angioid appearance. Occupying almost the entire space between the left eye and ear is a large tumor over which the skin is movable, which is hard and contains bone and calcareous tissue. By careful dissection it was removed from the underlying bone, which was found necrotic; this tumor had no connection with the eye.

"Histological abstract: Heart muscle apparently normal. Lung emphysema moderate, slightly pigmented at one point in

the section. On the pleural surface there is a new growth composed of a large number of rather small, round cells, but which contain here and there spindle and giant cells. In this tissue there is a variable amount of fibrous tissue stroma. This evidently a metastasis from the humerus. Spleen, trabecula prominent, vessels of pulp congested. Kidney, considerable congestion just beneath the capsule. Liver, in the neighborhood of the nodule there appears marked compression of the liver cells. The tumor nodule, which is separated from the liver tissue by a thin band of fibrous tissue, is composed of rather large, somewhat irregular alveoli, filled with cells of varying size and shape. The alveolar walls are very thin in most places, being composed apparently of a capillary and in some places of a very thin band of connective tissue cells with elongated nuclei. Cells in the alveoli are sometimes polygonal, sometimes round, but usually spindle shaped. A few minute nucleated giant cells; the nuclei of most of these cells are vesicular and contain one or more nucleoli. Section of the tumor shows alveolar arrangement similar to that found in the liver. But here the stroma is better marked. The cells show same appearance and character as the metastasis. Most of the cells in the primary growth are large. Some are varietated. In many places there is widespread necrosis."

Urinalysis by Dr. Moore, July 14th, 1900: "Acid Sp. gr. 1010, chemically negative. Microscopically, few epithelial cells and leucocytes."

Abstracts and Extracts.

BY WM. CLARK, M. D.

RESTORATION OF MOTILITY IN JOINTS WHICH HAVE BEEN ANKYLOSED.

Chlunsky (*Centralblatt f. Chirurgie*, No. 37, 1900) begins his article with the remark that we have up to date been in possession of no effective method of remedying ankylosis with contraction. The author reasons that the insertion of soft tissues between the ends of fractured bone leads to a pseudo-arthritis and therefore that the same substance in a joint cavity must prevent ankylosis. In a large joint it is practically impossible to introduce the desired amount of soft tissue, so he tried foreign substances. He resected the hind knee joints of dogs and rabbits and fitted over the ends of the long plates of celluloid, silver, zinc,

rubber or collodion; in every case the motility of the joint was preserved. The animals were killed from three weeks to four and a half months later and the affected joints found to be intact. The rubber and celluloid plates were found in good condition, while those of silver and zinc were worn out. Seeing that these plates had accomplished all that was desired and fearing that they might in future lead to unpleasant complications, the author decided to replace them by resorbable material. In another series of experiments he used magnesium, with the same satisfactory results, and the additional gain that at the end of eighteen days the magnesium had been absorbed.—*Courier of Medicine*.

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THE SIGNIFICANCE AND PATHOLOGY OF THE ARGYLL-ROBERTSON PUPIL.

Wilfred Harris (*British Medical Journal*, September 29, 1900) makes the following points: Though the Argyll-Robertson pupil is chiefly seen in locomotor ataxia and general paralysis, it may be found in many other diseases. It should be looked upon as an almost certain sign of antecedent syphilis, either congenital or acquired. The author has seen it in juvenile locomotor ataxia and general paralysis with marked evidence of congenital syphilis, in progressive muscular atrophy, in lead poisoning, aortic aneurysm, hemiplegia, syphilitic meningitis, ataxic paraplegia, nuclear ophthalmoplegia, choroditis, and in numerous instances in patients who presented themselves with all manners of symptoms, but showing no signs of ataxia or anesthesia, and with normal or even brisk knee-jerks, but in almost every instance with a clear history of syphilis. It seems most probable, in the absence of direct pathological evidence, that the Argyll-Robertson pupil is due to sclerosis of the non-decussating Meynert's fibres on one or both sides, according as the loss of light reaction is unilateral or bilateral, rather than due to any nuclear degeneration.—*Courier of Medicine*.

* * *

TREATMENT OF THE BREASTS AND NIPPLES.

G. L. Brodhead (*Canada Med. Record*) says that the child's mouth and the nipples should be washed with a saturated solution of boric acid after each nursing and the nipple kept scrupulously clean and covered with abolene on small squares of sterile gauze. This, if carefully carried out, will prevent abscess of the breast. If the nipple becomes cracked or eroded it should be

touched after bathing with boric acid solution, with 10 per cent nitrate of silver solution.

To dry up the secretion of milk in women who do not nurse, the breast-binder should be applied, cotton being placed in the axillae, around and between the breasts and sterile gauze over the nipples. It should not be removed except for purposes of cleanliness until the breasts are soft and painless. It should be kept tight and applied with the woman in the horizontal position. It may be necessary to limit the amount of fluid taken and to give large doses of Rochelle salts if the breast becomes cacked. In nursing women pressure should be avoided for fear of drying up the milk unless the breast are over-distended. Caking is often the result of the pendulous position, and requires support. Pain and tenderness require massage, not to remove the milk, but to distribute it equally throughout the gland. Care should be taken to see that the child nurses well; if nursing is properly established trouble will usually come to an end. It may be necessary to limit the fluids and give salts in case of over-distention. If pulse and temperature rise suddenly to a marked degree infection is to be suspected. Even now the process may often be arrested by early massage, since inflammation is at first in the ducts, and the pus can be gently worked out and wiped off at the nipple. The breast should be massaged every four hours and an ice-bag applied in the interval. Large doses of salts and small ones of morphin or codein should be given. The child should continue nursing unless there is pus.

* * *

PREGNANCY FOLLOWING REMOVAL OF BOTH OVARIES AND TUBES.

M. A. Morris (*Boston Med. and Surg. Jour.*) reports a case operated upon by himself. The woman came to him complaining of dyspareunia, dysmenorrhea, loss of weight and vaginal discharge. The uterus was anteverted and fixed and tubes and ovaries enlarged. She was operated upon July 18, 1898. Numerous adhesions were found between the ovaries, tubes and surrounding parts. A very long appendix was adherent, by its tip, and released. The right ovary contained a cyst as large as a hen's egg, and the left ovary a hematoma nearly as large as the cyst. The ovaries and tubes were tied off with silk quite close to the uterus and removed; the abdominal wound was closed with silkworm gut; the patient made a rapid recovery. She began to menstruate soon after the operation, and continued to do so regularly and painlessly for about four months. The dyspareunia disappeared

and her sexual appetite became normal. In May, 1899, she consulted Dr. Morris on account of morning sickness, nausea, cardialgia, and also abdominal enlargement, and was anxious to know whether she had a tumor. An examination showed clearly that she was pregnant. On September 12, 1899, she was delivered after a natural labor, of a healthy girl. About two or three weeks after confinement her baby died, and soon after that she menstruated, and has continued to do so regularly and normally since.

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CAUSES OF BAD BREATH.

A. W. Ringer (*Med. World*) cites the case of an old lady suffering from fetid breath who was cured by the removal of a large elongated square of offensive matter from one of the nasal passages, the lady being subject to atrophic catarrh. Other causes given are decayed teeth, disease of the lungs and diabetes. The most common cause, he thinks, is putrefaction within the duodenum. Another writer in the same journal has found the condition due to a caseous condition of the post-tonsillar crypts. These folds should be expanded and examined carefully with an ear spoon or dull probe.—*Med. Standard*.

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HINTS FOR THE MEDICAL EXAMINER.

F. M. Johnson (*Med. Exam. and Practitioner*) gives some excellent diagnostic hints. Here are some of them:

Persons with prominent features are apt to be vigorous both in mind and body, but if outlines are round and fleshy, have little stamina. Large mouths and round foreheads mean strong constitutions. Large heads and faces, with narrow or cramped chests, denote poor vitality. Large teeth are in favor of long life; short teeth, of a short life. Many tendencies to disease show themselves in the finger nails. If nails are curved, ridged or fluted, and on the first finger curls over the end, it generally signifies either scrofula or consumption. Bluish nails, with very little of the white crescents eliminated, point to a weak heart action. White specks and spots define a state of nervousness and impoverished blood. Black or blue spots underneath the nails show that some poison is in the system. A healthful nail is pink in color.

A pale skin means anemia; a yellow skin, biliousness. Veins showing blue on hands and face does not indicate royal blood, but the presence of carbonic acid in a system and demands air and exercise as a treatment. Reddish lines and veins are indicative of too much blood, with tendencies towards apoplexy. Flesh

should be firm and hard and natural in color, also well distributed. When this is true, although there may be an excess in weight, the applicant is a safe enough risk.

A full inspiration of the lungs should exceed the abdominal measurements or else there will be found a lack of responsive vitality in the person. A man of nervous temperament will be too light in weight according to the given tables of heights and weights, yet whose face shows clearly lines of strength and recuperative power.—*Med Standard*.

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TONSILS AS PORTALS OF INFECTION.

J. Ullman (*Med. News*), after a thorough discussion of this question, reaches the following conclusions:

1. That the normal tonsil has a physiological function, probably protective to the organism.

2. That being in itself often diseased, the physiological function of the tonsil is impaired and that instead of being protective, it is the nidus for the growth and distribution of pathogenic organisms and their poisonous products into the system.

3. That many grave and fatal general infections have their origin in the tonsils.

4. That, if the exanthemata, especially scarlatina, are of bacterial origin, the tonsil acts in part as port of entry.

5. That acute articular rheumatism and the diseases often associated with it, endocarditis and chorea, in a great majority of cases are due to the action of attenuated bacteria, their toxins or both entering the general system through a diseased tonsil.

6. That in rare cases of typhoid fever in which no intestinal ulcerations can be demonstrated, the similarity of the tonsillar tissue and Peyer's patches suggests the portal of entry of the Eberth bacillus into the tonsil.

7. That scrofulosis is often associated with diseased tonsillar tissue and that the tubercle bacillus often enters the system via the tonsils.

8. That the tonsil is too little examined at necropsy, and that much light might be shed on fevers of uncertain origins by bacteriological and histological examination of it.—*Med. Standard*.

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PHARYNGEAL ADENOIDS.

The importance of recognizing the presence of pharyngeal adenoids in the young has certainly never been thoroughly appre-

ciated by the ordinary general practitioner. When we learn that they are responsible for more than one-half of the pathological conditions met with in the ear and that most cases of deaf-mutism are not really congenital, but acquired and due to adenoid vegetations during infancy, the need of more careful investigations into the causes of nasopharyngeal obstructions is readily seen. P. D. Kerrison (*N. Y. Med. Jour.*, Feb. 2, 1901,) urges that it is not those cases which present the typical symptoms that are usually neglected, for the diagnosis is then clear, but when only partial obstruction occurs and the symptoms are those of frequent rhinitis, pharyngitis, tracheitis, bronchitis, and mouth-breathing, at least during a part of the day, the underlying cause is liable to be overlooked until the child's development is seriously interfered with or a complication occurs. Careful examinations have shown that the adenoids frequently contain tubercle bacilli, and diphtheria is especially virulent in children with vegetations. The ear complications are, however, the more common serious results secondary to these growths. Lesions of the conducting portion of the auditory apparatus first appear, such as tubal catarrh, otitis media and mastoiditis, but the internal ear may also be affected. Adenoids usually atrophy at puberty, but it is not very uncommon to see people of adult or even middle life suffering from the effects of these growths. Thorough removal is the only rational treatment. A general anesthetic is usually advisable and the adenoids grasped and removed by forceps specially constructed. The site should then be curetted with a Gottstein curette to remove every shred, for adenoids tend to recur if any part is left.—*Med. News.*

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BLOODLETTING AND SALINE TRANSFUSION.

At a recent meeting of the Paris Academy of Medicine, M. Reynaud (*Medical Press*, Dec. 12, 1900,) said that in grave affections (infectious and intoxicating), besides the usual indication, which consists in attacking directly the cause of the malady, there exists another, not less important, which is to remove from the organism the greatest amount possible of poisons (in acting both on kidneys and the blood), and to render them less dangerous in diluting them in the blood.

Bloodletting removes from the blood a large number of toxins; done with moderation, it gives fullness and strength to the pulse, facilitates the working of the heart, restores to the capillaries their contractile tone, and at the same time it favors the gaseous exchanges, by reason of the greater activity it gives

to nutrition. But that action, frequently heroic, of bloodletting, is only temporary; the toxic liquids of the organism are not slow to renew the mass of the blood; besides, as Barrie showed, diuresis is a little diminished by reason of the lowering of the vascular pressure.

By hypodermic saline injections the tension is raised and the diuresis increased, while the anatomical elements are stimulated, increasing thus the means of defence of the organism. The amount of blood drawn might be from 6 to 12 ounces, while that of the saline solution injected hypodermically or into the vein should be very large, from twenty ounces to three quarts. With an injection of 15 ounces no reaction takes place, but above that amount the pulse becomes full, the tension increases, the temperature rises to the fifth hour after the injection. Diuresis becomes abundant, and the elimination of urea and the chlorides is rapidly increased.

In concluding, M. Reynaud said that he prefers the hypodermic injection to that done through the veins; the results are less rapid, but just as complete and as durable.—*Medical Age*.

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SOME CAUSES OF SKIN DISEASES IN YOUNG CHILDREN.

S. Sherwell (*Med. Record*) mentions, among the causes which produce or prolong skin diseases in infants and young children, the use of too strong topical applications. The pharmacopœil preparations, even benzoated zinc oxid ointment, may all be graduated down with benefit and advantage. Vaseline is irritant to many skins, mercurial preparations are usually far too strong, and combinations in salve or lotion of chrysarobin, iodoform, ichthyol, salicylic acid, resorcin, etc., are almost always inadvisable. Another cause is the dread of the daily bath, allowing the rancid, irritant fat to remain in contact with the skin for days. Gentle washing with a mild alkaline solution, not allowing the skin to become macerated, should always be advised. Over-clothing is another difficulty in the summer time. Babies are likely to be swathed in heavy "belly-bands," and older children of the well-to-do loaded with starched "frills and furbelows." One of the greatest difficulties is in the frequency and character of the food. Infants are likely to be nursed every time they cry, keeping the intestinal tract overloaded and setting up and maintaining a reflex eczema. What the child most needs, especially in the summer—and cannot ask for—is a drink of sterilized water, slightly alkalized or sweetened. Older children are allowed to eat "every-

thing," and are often fed constantly, with resulting gastro-intestinal irritation and eczema. A troublesome variety of eczema occurs in more favored children who are persistently over-fed with well-prepared and highly nutritious food, and never know the meaning of a healthy appetite. Moderate starvation is good in these cases, and they are benefited by alteratives like hydrargyrum cum creta. In the internal treatment of skin diseases, as well as in other conditions due to faults of the gastro-intestinal tract, Dr. Sherwell prefers this drug to castor oil, rhubarb and soda and other laxatives and astringents. Dover's powder may be used with it if needed.

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THE RIGHTS OF THE UNBORN CHILD.

The rights of the unborn child is a subject which for some years has been attracting more and more attention. Our fathers accorded to the rights of the child but scant recognition. When delivery per vias naturales of the undiminished fetus was impossible or hazardous for the mother, the child was unhesitatingly sacrificed in the interests of the mother. Today this attitude is very greatly and rightly changed, and the rights of the child are given full consideration. The subject may be viewed either from the standpoint of religion or that of medicine. The Roman Catholic Church has always held that the commandment "Thou shalt not kill" applies to the child in utero. The medical man may not accept the authority of this Church upon the point at issue, but he can never contemplate the prospect of destroying a human life with feelings other than of the greatest repugnance, and the circumstances must be extreme and exceptional to enable him to feel justified in so doing.

Before the introduction of antiseptic surgery the Cesarean section was considered one of the most, if not the most dangerous operations in surgery, and had a mortality of at least eighty per cent. At the present time the operation has been robbed of most of its dangers. Many operators of experience consider that its inherent risks are not appreciably greater than those of ovariotomy. The term inherent risks is used advisedly, as this means the mortality of the operation done under proper conditions by trained surgeons. The experience of the large continental maternities, such as that of Zweifel in Leipzig, Leopold in Dresden, Olshausen in Berlin, and Schauta in Vienna, show that the average mortality of Cesarean section is about five per cent. These statistics include a certain proportion of cases in which the oper-

ation has been done when the conditions were other than those which should prevail, so that the inherent mortality is certainly well within this limit. In America the results in general have been far less satisfactory, for the reason that the percentage of cases in which the operation is undertaken as a last resort, after all other means of delivery have failed, is far larger than on the Continent. These results do not argue against the safety of the Cesarean operation, but show the necessity for the introduction of other standards in the practice of obstetrics. So long as obstetrical cases are not studied intelligently before labor, so that those requiring major operations may be dealt with promptly and properly, so long will the present bad results be obtained in the United States. That our results can be revolutionized with the introduction of a more intelligent practice is shown by what has been done in the city of Boston. In June, 1898, Dr. Edward Reynolds collected and reported twenty-two cases of Cesarean section performed in Boston, giving birth to twenty-two living children, and with no mortality to the mothers. (*Amer. Jour. Obstet.* Vol. I. 1898.)

Dr. Reynolds writes me, that since the publication of his paper he has done four successful Cesarean sections, making nineteen in all, performed by himself.

The limits of an address will not permit me to enlarge upon the relative merits of the conservative Cesarean section, the Porro operation and symphyseotomy. In cases not complicated by the presence of tumors and in which infection can be excluded, the majority of obstetricians of experience prefer the conservative Cesarean section, believing it to be a safer operation than the Porro operation under these circumstances; and many prefer it also because it does not interfere with the possibility of future conception. With this position I am in hearty accord. When labor per vias naturales is prevented by the presence of tumors of the uterus, the Portro operation is preferable to the conservative Cesarean, both because of its greater safety and because the patient is at the same time cured of the tumor. This may or may not be the case when the tumor is ovarian in origin. The Porro operation is the operation of election when it is necessary to perform Cesarean section upon a patient already infected. Most obstetricians limit the employment of symphyseotomy to cases of moderate contraction (having at least two and three-quarters inches in the true conjugate) in cases of flat pelvis. It may be added that at the present time there is a decided reaction against symphy-

seotomy, which has lost ground in favor of the Cesarean section within the last few years.

This, after all that can be said on the subject on hand, brings us to the true moral of our story. It is re-emphasizing the necessity of early and accurate diagnosis in all cases of breast tumors. Mammary growths, as a class, can never be trusted. The weight of evidence is so strongly on the side of malignancy, threatened or pronounced, that no conscientious practitioner can afford to have any doubts as to the responsibilities he should assume. There is hardly a "simple tumor," so called, which, when discovered in the breast, may not eventually become malignant. The man who takes the chance of an exception to this rule must of necessity be very sure of his ground. On such a possibility all rational and timely treatment necessarily depends. No question of diagnosis in any other disease has a more practical bearing on ultimate results. Fully ninety per cent. of breast tumors in older women are probably malignant, and the remaining ten per cent. are very objectionable tenants. A mammary neoplasm is bad company, no matter how we may argue to the contrary. It is the leaven in the lump which may at any time assert itself.

If it were necessary to emphasize any further the necessity for accurate diagnosis in each individual case, it should be added that the surgeon who is to operate should, above all others, place himself beyond the chance of possible error. The only absolutely sure way to do this is by an exploratory examination of every tumor before its actual extirpation is attempted. This is the rule with every careful operator. No matter how plain the case may appear to be, there is no argument against being doubly sure. In one instance, when no doubt as to correctness of diagnosis seemed possible, when the stony fixed tumor was there, when the skin was dimpled, when the axillary glands were enlarged, and when even previous aspiration was a cheat and a snare, I have happily by such means saved a condemned breast by the simple enucleation of an inflamed, thickly walled, and deeply embedded cyst.

The strongest side of the argument for safety is the removal of all growths, whether in young or old. It is only a question of saving the breast in the case of benign tumors, and of sacrificing the entire organ and its varied lymphatic connections on the other. Even in adenomata there are the best of reasons for this course, considering the oftentimes great suffering during the parturient and lactating periods, and the additional fact that the subsequent engrafting of malignancy is by no means an abso-

lute impossibility. No tumor of the breast can be considered a trivial affair. The first thought of the victim is that of probable cancer, and in the great majority of instances, with age on the side of the argument, her suspicion is reasonably well founded. The main obstacle to the definite settlement of the question is the family physician himself, who too often calms reasonable fears and postpones judgment until the disease entrenches itself beyond the hope of its radical and absolute conquest. Thus the chance of the earliest possible diagnosis is denied the anxious patient and the first irretrievable step is taken toward an utterly hopeless prognosis.

As long as the respectable members of our profession are willing to perform the duties requested of them by railroad companies for less compensation than a section hand; as long as they accomplish the most essential services to the success of life insurance companies for the pittance they may see fit to dole out; as long as they enter into an undignified struggle for a certain practice like bidders at a country auction; as long as they make autopsies for judicial purposes requiring as much professional skill and knowledge as for a capital surgical operation for the insignificant sum of from \$5 to \$10; and finally as long as they tamely submit to perform the necessary clerical, technical and scientific work for maintaining the health and securing to the State, as far as in our power, immunity from the inroads of fatal epidemics for a pittance, or without even that—just that long will the public reward our services as of little moment.

Our standing in each community as a profession will be as it has been measured by our own estimate of its worth. If we feel able and willing to contribute to the relief of the poor and distressed the act will surely be an honorable one. On the other hand if we discredit our fee bill or humiliate our profession for a little temporary popularity with Midas, it will react to our shame as it ought; and we will still remain unrecognized as a profession.
—O. A. Rea, M. D.

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Should not every physician, and especially every college professor, do his best to keep the incompetent, the ne'er-do-wells and certain failures from entering our ranks? No young man should be encouraged to take up the study of medicine unless he possesses natural qualifications of an exceptionally high order. Good drug clerks, good barbers, good carpenters and good school teachers should not be urged to abandon occupations for which

they are suited, and in which they will make probably as fair an income as they will make in medicine for at least ten years. Every professor in some college feels that it is his duty to secure at least one student each year for his class; sometimes he goes into the highways and byways and compels them to come in. Only too often the recruits thus obtained are neither desirable from the standpoint of intelligence nor pleasant associates from the standpoint of personal character.

We plead for more care in the selection of medical students; we plead for less enthusiasm in urging young men to take up the study of science for whose practice their personal qualifications do not fit them; we plead for a less crowded profession by raising the standard of admission into that profession.—*Philadelphia Medical Journal*.

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I have tried to make unequivocal the assertion that migraine is neither simply a manifestation of uric acid intoxication or intestinal absorption, nor pain begotten of disease in the nose, stomach, or uterus; that it is not the cephalic distress of nervous prostration; not the voice of anemia, not the signal of organic disease—but be it distinctly understood that the attacks may be made more frequent and severe, may even be clearly determined by any such disturbing influences. A man who is accustomed to have a migrainous seizure about once a month may have one every week if he indulge in undue dissipation or be subjected to great mental strain, loss of sleep, the debilitation of general disease, or the deleterious effects of poison.

Negatively, it is to be said that migrainous headache need not be accompanied by nausea or vomiting; that although sometimes called hemicrania the pain need not be one-sided; and that although often associated with disturbances of general sensation or special senses, such accompaniments are not uniform. Furthermore, it may be well to state that ophthalmic migraine—that is, migraine accompanied by scintillating scotoma, central scotoma, hemianopia, and the like—is no more caused by ocular anomalies than are migrainous headaches unattended by visual symptoms.

In my own experience migraine is most frequently miscalled neuralgia, gastric headache, and nervous headache. To be sure, it really is a nervous headache, but generally thereby is meant a head pain simply as part of general nervousness or caused by some mental or emotional perturbation, whereas such relation in migraine is exceptional.

The only proper treatment of neurasthenic headaches is treatment of the neurasthenia. Simply alleviation of the symptom to the neglect of the casual condition is to be roundly condemned. The relief so obtained is incomplete, transitory, and only makes the case worse afterward. In the rational handling of such a case the cephalic distress is to be practically ignored, with the assurance that when the neurasthenia is cured the head trouble will have vanished. For many reasons, however, it may be good policy to administer palliative treatment until there is time for more radical measures to become effective; to put in a temporary prop—a prop to hold the confidence as well as the comfort of the patient—until a permanent support can be built up. For this purpose bromide of potassium or sodium is ordinarily the best drug, but enough must be given to be effective. I have no patience with the routine prescribers of five-grain doses of bromide. In the absence of idiosyncrasy, I would as readily join our little-pills brethren and give the tenth dilution of bryonia or pulsatilla. Twenty to forty grains three times daily is about the right amount, and although chemically strychnine is incompatible with the bromides, and physiologically is supposed to be antagonistic, I often give both drugs, I know with good effect. Ordinarily they are not combined in the same mixture, as the strychnine is precipitated.

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CHALAZION.

Two conditions in the lids of frequent occurrence should be differentiated, hordeoleum and chalazion. The first requires but the simple incision to relieve or it may get well without treatment, but the second will not yield to such simple measures, and it is a duty we owe our patients to differentiate them, and not tell them that a chalazion is a sty and will soon be well, for in all probability it will not, and, while not a dangerous condition, there are excellent reasons why it should be promptly treated, and not allowed to go on for weeks and months. The existence of a chalazion unrelieved is likely to cause a succession of them. Being a retention cyst, mechanical pressure is likely to occlude the next duct, and so on till a number are involved, and, breaking down, one large sac is formed, causing annoyance both from cosmetic effect and impaired mobility of the lid. There is likelihood, also, of its suppurating and finding an outlet through the skin, and the cicatrix may so divert the direction of one or more lashes that wild hair may cause great annoyance and irritation.

The proper treatment is incision through the palpebral conjunctiva and a thorough curetting of the sac. This may be done by any one, providing that there are at hand the necessary instruments, but if you have not a Prince forceps and curette, it will be useless to cut it, and you will save time and reputation by either getting these instruments or sending the patient to a specialist.—*Providence Medical Journal*.

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TO CHECK HEMORRHAGE.

Chloride of calcium, in doses of eight to sixteen grains, every two to four hours, should be tried in all forms of persistent hemorrhage, especially hemoptysis, hematuria, and intestinal hemorrhage of typhoid fever, for this salt increases the coagulability of the blood. It should be remembered, however, that this drug should not be used more than three days continuously, for its prolonged use decreases the coagulability of the blood.—*Jour. American Med. Asso.*

Herman J. Boldt, in the *New York Medical Journal*, reports an operation for laceration of the perineum in which Corning's anesthesia failed to produce insensibility to pain. Two injections were used by Goldan, who is an expert in this form of anesthesia, but there was still sensibility to pain and resort was had to general anesthesia. The tear was complete, going nearly two inches into the rectum. The border of the rectar tear was dissected from the surrounding tissues, and a continuous suture of fine catgut was used beginning from above, and so passed that the mucosa was not injured. One suture of silk-worm gut was used for the sphincter which, he says, is sufficient.

The vaginal tear was treated in the same manner. Only three sutures are used to unite the perineum, more than these are likely to cause strangulation of the tissues between them. He has not had a single failure when this method was used.

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SENILE PRURITUS.

Arthur Jaenicke's method of relieving this obstinate affection, which always tries the patience of both patient and physician, is to brush the affected portion of skin with a soft brush till a plentiful desquamation of the epithelium has been produced. At first this is repeated three times a day for four or five days, after which time the material which can be brushed away is very small in amount, and the frequency of the treatment may be correspondingly diminished. Longer than two days should not, however, be al-

lowed to elapse between successive brushings; bathing is also sure to be followed by a relapse.—*Centralblatt für innere Medicin.*

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In primiparae the drug in my hands has not been as useful as in multiparae. It would appear that the cause of this is that the slowness of the labor is not so much the lack of nervous force in the individual as the failure of the head to engage and press against the os early as it does in the normal multipara.

The result of the administration of quinine in a case of uterine inertia is the appearance of strong intermittent quickly recurring uterine contractions, exactly resembling normal labor pains, and entirely different from the tonic contractions brought about by ergot.

For some reason cinchonism has not occurred in these cases.

I would strongly urge, then, that quinine should be used in all cases of multiparae, where labor has actually begun, and where the pains are slow and ineffectual and the os fairly dilated. In fifteen minutes to half an hour the pains will increase in frequency and strength. If there is no obstruction the labor will be speedily terminated.

The employment of the drug will frequently obviate the use of forceps in uterine inertia. Necessarily it should *not* be used, and valuable time lost, where the failure of the head to engage is due to malpositions or to some disproportion between the sizes of the head of the child and the pelvis of the mother.

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PUERPERAL CONVULSIONS.

Subcutaneous or rectal injections of normal salt solution will save life. A hot salt solution thrown into the transverse colon had the most instantaneous effect on a convulsed patient I ever saw. She had been in convulsions for four hours, and after using the hot salt water (one-half gallon), her kidneys acted, she began to sweat profusely, relaxation was complete, the strain taken off the nerve centers, and the lady was restored to her family, and to-day is a happy wife and mother.—*Dr. John F. Watson, in Medical Council.*

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The caecum and appendix should be viewed as an ancient stomach, the rudiment of a fading organ possessing the misfortune of all remnants, viz.:

The inability of its cells to resist trauma and invading microbes.

The trauma of the psoas muscle is the chief cause for appendicitis.

The subject is liable to appendicitis when under excessive muscular activity if the appendix happens to contain virulent microbes.

Women suffer less from appendicitis than men, because her appendix does not lie as frequently within the range of psoas action, muscular trauma, as does the appendix of man.

Any segment bowel, caecum, colon or enteron which lies within the range of action of the psoas muscular trauma, suffers exactly the same damage as that of the appendix, but the cells of the appendix being atrophic, rudimentary, non-vital and non-resisting to trauma and infection, are unable to struggle and battle again life's invading forces.—*Byron Robinson, M. D.*

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Sometimes we hear it said that anesthesia and antiseptics have done more for the human race during the century which is now closing than anything else. I do not know whether that is true or not. It is a little surprising that in the hall of fame, of which we have read so much, no doctor's name appears. Antisepsis and anesthesia, for all they may have done so much for the human race, do not appear to have been considered of sufficient importance to have entitled their discoverers and promoters to be perpetuated in this hall of fame. However, this is not the only instance in history where one's devotion to art has been neglected and failed to receive public appreciation. In that hall are the names of men who invented engines of destruction, who were great generals, who commanded troops, and whom the world calls heroes; and I suppose they are, notwithstanding they have slaughtered thousands, and thereby achieved some glorious end. But I do not think the average medical mind can conceive any situation of that sort. We are so interested in trying to save life, to perpetuate man, that we naturally think the greatest man is he who saves the largest number. However, we are not all the people. only a very small proportion of them, and our relations are very simple indeed. We have to do only with the infirmities of mankind. The needful surgery, which you have studied with so much zeal and will continue to study during the remainder of your lives. concerns most of the people not at all; only the man who is ill, the man who is injured, the soldier who falls wounded in battle, appreciates what you can do.—*Hal C. Wyman, M. S., M. D.*

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There is a tendency among those physicians who have not had a bacteriological training to underestimate the value of microscopical diagnosis. Influenced by the teaching that the germ is the all sufficient cause of disease, the bacteriologists in the past have claimed too much. To them the germ was the disease. Now that the bacteriologists have had to recede from this position the doctor who does not use the microscope believes that it weakens all microscopical evidence. This is not true. Microscopical evidence is of more value than ever before if the physician has the knowledge to appreciate it. The fact that we have a pseudo-typhoid, a pseudo-diphtheria and possibly a pseudo-tubercular bacillus which causes the bacteriologists to hesitate, only emphasizes the necessity of the physician being a closer student of the problem of environment: of the germ which causes virulence, and environment of the patient which causes susceptibility.

In a germ disease, there is a battle between two living entities, or rather two armies of living cells. When pathogenic germs find a human organism weak enough to permit an invasion, the battle is on, each using utmost power to overcome the other. If the human cells are slow to act and the germs, or their products, are able to overcome some vital center death results. If they respond quickly antitoxins, phagocytes and disgestive products are poured into the blood, the invading germs are overcome, digested and excreted. The existence of the human organism and its ability to complete its life cycle depends upon its power to maintain germ immunity.

The microscope, with careful technique, at times gives results with almost mathematical accuracy, which cannot be claimed for the uncertainties of clinical diagnosis alone. In the use of the microscope a physician should keep in mind that most often the greatest safety of his patient, and his own best mental development, comes through the close study of the clinical phenomena of disease.—*W. K. Jacques, M. D.*

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SYPHILIS VS. GONORRHEA.

The common opinions held by the laity, that gonorrhea is no worse than a bad cold, and syphilis is never curable, and is transmitted to their children's children, is fast losing ground, and well it should. The statement can be made without much fear of contradiction, that of the two diseases syphilis is much the preferable, if we must choose between them. It is rare that death or even much deformity can be traced to

syphilis, provided the disease is treated according to the methods in vogue today; whereas on the other hand, no one can foretell the ultimate result which may follow an infection from the gonococci. It is a very broad statement, but could gonorrhea be eliminated from the category of diseases affecting humanity, fully 10 per cent. of the suffering that the human being is subjected to would be a thing of the past. It should be remembered that gonorrhea kills more people than syphilis, although the latter takes years of protracted treatment for a cure.—*J. Henry Dowd, M. D.*

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My own views on the question of surgical intervention in gall-stones have been formed almost entirely from what I have done myself and from what I have seen others do; not that I have been uninfluenced by the experience of others. When that experience has been similar to my own, I have felt encouraged to further efforts; when it has been contrary, it has tended to make my steps more cautious. On the whole, the tendency has been toward the more radical treatment of gall-stones at the time of their earliest manifestations.

I have observed that the earlier the operation, the less danger and the greater the success. The removal of gall-stones from a normal gall-bladder is without mortality. I can say, with Robson and others, that all my patients have recovered after the simple removal of gall-stones from a normal gall-bladder. The proportion of such cases, however, has not been as large as it should be, and as I hope it will be, for but few patients have come to operation until they have been forced to it by years of repeated attacks, or by the unbearable suffering of a permanent jaundice.

It must be admitted, as I have said before, that early operation on patients otherwise well has little if any mortality. A simple cholecystotomy in health is probably somewhat more dangerous than a simple appendectomy in health. The number of my cases of cholelithiasis is, however, too small, compared with those of appendicitis, for a comparison of value. Then, too, the greater average age at which patients are liable to gall-stones is alone a sufficient reason for greater mortality. Moreover, in gall-stone surgery success may be compromised by the giving away of a suture, by the pressure-ulceration of a drainage-tube, by extension of infection into the liver through the bile ducts. These facts can not but influence unfavorably the prognosis of early operation on the gall-bladder as compared with the interval operation in ap-

pendicitis. True, these dangers are, as far as my observations go, matters of theory rather than of experience; yet I should not expect a series of several hundred simple cholecystotomies, performed at the usual ages of patients with gall-stones, to be without some slight mortality.

Operations for the removal of gall-stones, even under unfavorable conditions, as those on cases of long standing, on patients with contracted gall-bladders, with ulcerated surfaces and infected secretions, with constitutional disturbances and systemic depression, present a mortality much lower than one would expect.

Operations on the cholmic are attended by a relatively high mortality. In this class of cases the operation has often to be performed on the common duct, where the dissection is broadest and deepest, and the patient's power of resistance feeblest. The significant and unfavorable factor, however, is the paundice, and not the dissection; for an even larger percentage of deaths has followed simple exploration for malignant disease blocking the biliary passages than has followed simple operation for gall-stones in prolonged jaundice. Indeed, all my cholecystotomies have been successful. The fatal operations of this class have been cholecystotomies with removal of stones from the hepatic and cystic ducts through the gall-bladder. Considering the gravity of the acute infections of the gall-bladder, this class of cases has been most brilliant, for nearly all the patients have recovered after simple drainage.

The most impressive argument for early operation in biliary calculi lies in the suffering and death which so frequently attend delayed surgical treatment. Even when health is finally restored, it is only after prolonged suffering and illness. In many cases cure is attainable only after repeated, complicated and dangerous operations.—*Maurice H. Richardson, M. D., Boston.*

* * *

In all the book-shop windows of Vienna, writes a correspondent of the *Philadelphia Medical Journal*, is to be seen Professor Schenck's little brochure, "Aus meinem Universitätsleben," wherein he seeks to clear himself before the world of the charges by means of which his enemies ousted him from his position at Vienna. In the sixty-nine pages he outlines the story of his thirty-three years of work in his laboratory at Vienna; how he had to live on a wretched pittance that did not permit him to appear in society even, to say nothing of tasting the other joys

of life; how his work in biology had found recognition throughout the world; and how, since the year 1864, he had used every opportunity to investigate the laws governing the influencing of sex. He shows, further, that the newspaper announcement of his theory did not come from him, and was, besides, incorrect. Then he charges the University Court at Vienna of unfairness, in that they refused to hear his witnesses, and in the second case gave him no announcement that his case was on, and thus prevented him from putting in an answer. He shows how trumpery the charges against him were—being of actions of which at least half a dozen of the other members of the faculty were guilty. The cause of it all he lays at the feet of one or two colleagues, who, out of hatred and envy and jealousy at his earnest labors and successes, intrigued until they obtained the ear of the royal ministry, and, *voilà*, he was out. He promises to bring out a larger and more complete discussion of his theory in the near future.

* * *

In the treatment of severe anemia I should place rest as of first importance. I have seen many cases where all therapeutic treatment had failed, and when placed in bed for a while the patient would respond quickly to medicines. Attention to the secretions, the diet, the skin, the mental condition, is all-important. The great therapeutic agent, and the one of the greatest virtue in these diseases, is the Blaud pill of ferri et potassium carbonate; no other preparation of iron can compare with it. We have here a notable example of what Fothergill advocated long ago, namely, that iron, to be efficient, should be combined with an alkaline salt of some kind, preferably potash. Niemeyer claims that he laid the foundation of his large practice through the use of this formula.

The next best agent is arsenic. The improved Blaud pill contains this article, and it is a very desirable combination. In severe cases oxygen by inhalation is good. Protonuclein and the thyroids may at times prove efficient. It is probable that the milder forms sometimes pass into the severe types if not arrested, and it is important to begin treatment early and pursue it energetically. —*W. N. Sherman, M. D.*

* * *

The main indication for the use of strychnine in heart weakness, therefore, is low blood-pressure, and its action results through constriction of the vessels. This indication, however, by no means always covers that for digitalis. In my opinion the raised blood-pressure effected by strychnine proves useful to our

patient, in the long run, not by any immediate effect upon the power of the heart but rather by increasing the velocity of the blood current and consequent improvement in the functions of vital organs—the brain, the kidneys, etc., including, of course, the muscle of the heart itself.

To obtain the best results from its administration in heart weakness, strychnine must (1) be given in small doses, because large doses, apart from the undesirable effect upon the entire spinal cord by raising the blood-pressure, immoderately increased the resistance to the heart's action long before they can come to its assistance indirectly; and (2) it must be employed at a time when the strength of the heart has not yet sunk too low. If Binz is right in stating that strychnine does not produce the elevation of the blood-pressure by stimulating the vasomotor center, but by increasing its reflex irritability—and hence peripheric impulses are required to accomplish the contraction of the vessels—then the strychnine *must* fail us in that very state of collapse in which modern routine so often continues to use it as a last resort. We do, indeed, sometimes succeed, under conditions which it is easier to divine than to recognize, by its use to prevent or delay impending collapse; but when collapse has once set in, I am convinced the drug is of no good effect. Moreover (3) it must not be given even in moderate doses for too long a time, because like digitalis, it may accumulate in the body. Physiologists and pharmacologists seem to be better informed as to the cumulative effects of strychnine than the clinicians. Lauder Brunton calls it "a cumulative poison, as it contracts the renal arteries and thus prevents its own excretion."

All these rules we disobey far too often. The special indication for strychnine is too often supposed to be the same as for digitalis. There are cases in which this is correct, but in many more cases only one or the other remedy is indicated; *e. g.*, in fevers, while the heart's power is still sufficient, the tension of peripheric arteries may be reduced to a dangerous degree by other causes than heart weakness; in that case strychnine in a few decided doses is the right remedy.

After all the results of experimental pharmacology it cannot be doubted that relatively large doses—large within therapeutic limits—continued for too long a time or repeated at too short intervals, will, in place of stimulation, effect paralysis of the respective centers. This paralysis, says Binz, may be conceived as arising from the excessive activity that was called forth in the pro-

toplasm by the strychnine, or from the subsequent direct paralysis that follows upon the original excitation, here as well as after all other stimulants. Unfortunately, we do not clearly recognize it at the bedside; if it supervenes, after the strychnine had been evidently useful in the beginning, we are inclined to ascribe it to the advancing disease; our remedy has not been effective enough, we increase the doses, and finally lament that the patient could no longer be benefited even by *so much* strychnine! I have not only witnessed such persistency at the bedside, but been guilty of it myself.

It is easier to recognize the unintended stimulation of the spinal centers when carried to the highest pitch. Last year a phthisical patient of mine, while spending the summer in North Carolina, had become weak from diarrhœa, and bedridden, and set in. At my urgent request, by letter, the drug was discontinued, was treated to liberal doses of strychnine until tetanic convulsions and both convulsions and diarrhœa ceased. Not long ago I observed at the bedside a therapeutical acute strychnine poisoning, which expressed itself in the most intense mental and sensual excitation, in general hyperesthesia, exquisite acuteness of sight and hearing, restlessness, hurried speech, the hasty flight of thought, extreme anxiety, and exaggerated reflexes. This drug effect had no relation to the subsequent death of the patient; but, on the other hand, the state and disease of the patient gave no clew whatever to the symptoms mentioned, which I can ascribe only to the large and frequent doses of strychnine.

A Medical Practice Law for California.—A bill regulating the practice of medicine in California has been passed by the legislature, after being so amended as to be no longer obnoxious to the Christian Scientists and osteopaths. The act provides for the creation of a board of medical examiners to be appointed by the medical societies of the allopathic, homoeopathic, and eclectic schools. The provisions regarding the qualifications of practitioners are more strict than heretofore; power is given to revoke licenses for unprofessional conduct, and advertising improbable or excessive claims to curative powers is ground for the charge of unprofessionalism.

THE Cleveland Medical Gazette

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Editorial.

A STEP IN THE RIGHT DIRECTION.

We are pleased to see, in the announcement of the Medical College of Western Reserve University, appearing in the *Journal of the American Medical Association*, that in the future completion of the junior year at a recognized college will be required for admission.

We congratulate the institution upon the courageous stand it has taken and believe that this departure from the usual custom of a superficial preliminary entrance examination will bring it added strength and influence.

We hope it may not be long before other medical schools may find the way clear to emulate the example of the Western Reserve in its effort to dignify and place its medical department upon a high plane. The step should receive the unqualified endorsement of every earnest physician.

A high-school training is not adequate for the proper and intelligent pursuit of medicine, nor is it sufficient to admit a student to any other post-graduate course. Again, the age of the average high-school graduate has not endowed him with sufficient maturity of mind or stability of purpose to pursue his professional studies to the best advantage.

Every young man of any promise possesses a superfluity of spirits, and an abundance of energy, which is fortunately exhausted, in a large measure, while he is an undergraduate at college, and before he is confronted by any serious object in life. It is perhaps for these reasons that the atmosphere of the undergraduate school is less adapted to earnest research and mature reflection than is that of the post-graduate institution.

Medical students will not be slow in recognizing the advantages of an association during their professional course, with men of ripe judgment, high ambitions and adequate educational qualifications, and in the future the school which is open only to college bred men will possess strong attractions for the highest grade students.

It is questionable, as conditions exist today, whether any medical school which is not sufficiently endowed to make it, in a large measure, independent of the fees of its students, should be encouraged to exist. If its salvation depends upon the enrollment of students who are unqualified by age and education to follow its courses with profit to themselves and with ultimate credit to the profession, it certainly should not.

Competition for *quality*, not *quantity*, of students should be the aim of every medical school of the first rank. Harvard University has been among the foremost in this direction and at present requires a degree in arts, literature, philosophy or science for entrance to its medical course, and we are glad to see the Western Reserve taking a step in this direction.

G. SEELEY SMITH.

TO FIGHT TUBERCULOSIS.

We have received an announcement that the Second Annual meeting of the American Congress of Tuberculosis will be held at the Grand Central Palace, in the city of New York, on the 15th

and 16th days of May, 1901. The objects of the Congress will be to exchange the information and experience gained throughout the world, as to forces and methods most available for the extermination of consumption which, at the present moment, is a disease, the most destructive of human life of any that now afflicts humanity.

The meeting will be held conjointly with the Medico-Legal Society of New York and the questions to be discussed will involve remedial legislation. In the matter of legislation it may be of interest to note what steps are being taken by the legislature of Wisconsin. In that state a bill has been introduced which provides for the establishing of a state hospital, in some suitable location in Wisconsin, for the treatment of incipient pulmonary tuberculosis, and making an appropriation therefor. As the provisions of the bill are of interest we here reproduce them:

"The people of the State of Wisconsin, represented in senate and assembly, do enact as follows:

"Section 1. A hospital in some suitable locality of the state, for the treatment of incipient pulmonary tuberculosis is hereby established, to be known as the Wisconsin state sanitarium. The general supervision and government of said hospital is vested in the state board of control.

"Section 2. The state board of control is hereby empowered to select a site for the establishment of said hospital, such site to be subject to the approval of the governor. The state board of control is empowered to contract for the purchase of not exceeding one thousand acres in extent for the establishment of such hospital, or at the request of said board of control, subject to the approval of the governor, the commissioners of public lands may set apart a like amount of land now owned by the state, for the purposes of said hospital.

"Section 3. To carry into effect the purposes specified in this act, there is hereby appropriated out of any money in the state treasury, not otherwise appropriated, the sum of one hundred thousand dollars, to be paid in such sums and at such times as the exigencies of purchase of site and construction of buildings may require, which sums shall be paid as provided by the laws governing appropriations to other state institutions under the supervision of the state board of control.

"Section 4. Section 561j of the Wisconsin statutes of 1898, so far as applicable, shall apply to this institution.

"Section 5. All persons afflicted with incipient pulmonary

tuberculosis may be admitted to said hospital after such examination into their condition as is required to be made to determine the condition of persons who are alleged to be insane and for whom admission is sought to the state hospitals or county asylums for the insane. All the provisions of law relating to the examination and commitment of such alleged insane persons, shall, so far as practicable, apply to persons whom it is sought to have committed to the hospital for those afflicted with incipient pulmonary tuberculosis; and all powers conferred upon the judges of the several courts as to such alleged diseased persons and all the duties devolving upon such judges in relation to their examination and commitment shall be exercised in the examination and commitment of persons to said hospital, so far as such powers and duties are applicable. All persons resident of this state who may be committed to said hospital for said disease shall be maintained therein at the expense of the state; but the county in which any such person last resided before being brought to the hospital shall pay one dollar and fifty cents per week for his or her support and thirty dollars per year for the clothing to be supplied to such person. The relatives, friends or guardians of any person committed thereto may pay for his maintenance and clothing or any part thereof, and the accounts of such persons shall be credited with any sums so paid. This charge shall also be made for the maintenance of any persons transferred by the board of control to said hospital. Said board shall adopt and publish a schedule of maximum charges for the care of such persons who shall not be entitled to be kept therein free of charge.

"Section 6. Any person who may be afflicted with incipient pulmonary tuberculosis may, upon his written application stating his condition, supported by the certificate of at least two physicians possessing the qualifications prescribed by section 585 of the Wisconsin statutes of 1898, based upon personal examination of such person, be admitted as a voluntary patient to this hospital in the discretion of the superintendent thereof, for treatment. Such person, if so admitted, shall be a private patient and shall be required to pay such sum for his maintenance and at such times as the state board of control may by rule or by law prescribe, and no charge for his maintenance shall be made against any county; if so admitted, such voluntary patient shall have the same standing and be subject to the same laws, rules and regulations as other patients, except that he shall have the right to leave such hospital at any time, if in the judgment of the superintendent he is in fit

condition, on giving five days' notice to the superintendent of his desire to do so.

"Section 7. This act shall take effect and be in force from and after its passage and publication."

This is a good move on the part of Wisconsin and it is to be hoped that the bill will pass the House.

In Canada, too, a determined movement has been made to check the spread of tuberculosis. In February, the National Society met in Ottawa and transacted important business. More recently, a public meeting was held in Toronto and a resolution adopted to urge the City Council to provide funds for erecting a sanitarium to care for tubercular patients. The resolution is as follows:

"Whereas, in November last the Medical Health Officer of the city recommended, and the local Board of Health unanimously endorsed, the submission of a by-law for \$50,000 to be used on the lines of the act respecting municipal sanitarium for consumptives, passed last year, for the erection of a rural sanitarium within easy reach of this city, with a wide-open door to our consumptives in all conditions of life and in all stages of the disease;

"Therefore, be it resolved, that, in the opinion of this meeting, the City Council be respectfully requested to take steps immediately to have such by-law prepared and submitted to the qualified ratepayers not later than the municipal elections in January, 1902."

In the discussion connected with the resolution one physician stated, "That the death rate from tuberculosis in Canada was probably one in seven or eight, and that one-fourth of the deaths between the ages of fifteen and fifty-five were due to tuberculosis."

It is a fact, borne out by statistics from post mortems, that 25 to 50 per cent. of people who died from other causes than tuberculosis had the disease in a dormant state. We are justified, too, in believing that fully 75 per cent. of consumptives are curable if taken in the incipient stages. With these facts to go on, it would seem to be a duty of physicians to educate the popular mind as to the true nature of tuberculosis so as to enlist their aid in preventing its spread as the more enlightened ones now aid in preventing the spread of smallpox.

TWENTIETH CENTURY MEDICINE A LIBERAL EDUCATION.

I

Allison Drake, writing on the above subject in the *Colorado Medical Journal*, has the following:

Though the century is purely an artificial division of time, being indirectly founded on the normal number of one's fingers or toes, yet the end of the century has come to be considered a divisional line for events and a convenient time for a general casting up of accounts. In such a reckoning the achievements credited to the youth stand in general in unfavorable contrast with those of the centenarian, but are now and then brought into enviable prominence by the premature reckoning; and so it happens that at the end of the nineteenth century that region of the globe whose metropolis is on the 105th meridian West, stands in the role of a youth that may fearlessly challenge the oldest to a comparison of all that owes existence to human genius, energy and enterprise. Dry and treeless wastes of vast extent have here been suddenly transformed into orchard and meadow, garden and fruitful field. Countless enterprises of colossal magnitude have magically altered the aspect of the country, and what was once but a wilderness and waste has suddenly become a health resort for all the world, where the invalid who comes early may hope to live long. Truly, here is fuel to fire the cockles of one's admiration. But this is not all. Foundations and equipments for the higher training of the intellectual faculties have, in strong contrast with the usual precedence elsewhere, kept pace with the material progress of this once hopelessly inhospitable land. Here the student of any and every useful science and art, the academic and the professional student, may pursue his course in institutions of high efficiency. In the van of all we would place the colleges of medicine.

II

It may seem strange to some that the medical college should, from an educational standpoint, be seriously named in precedence of the so-called academic college which has from time immemorial superciliously held without challenge the proud post of dispenser of a liberal education; but intellectual revolutions have of late been rife, and the latter half of the nineteenth century has ushered into the college world a revolution that will not be quelled

until the last cavalier of medieval fancies about the proper composition of a liberal education has unconditionally surrendered. From this let us not be understood as lacking in respect for the time-honored trivium-quadrivium "arts;" indeed, we confess to an admiring weakness for certain academic studies and particularly for the humanities, the legerdemain of algebra, and the eternal truths of geometry. Surely, considered merely as a thing of beauty, what truth is more admirable than for example, that the surface of a sphere is equal to four great circles? And our admiration for the beauty of this truth is heightened when we reflect that man, sprung from the amoeba, rose to the discovery and demonstration of that truth. And here we would parenthetically observe that much is gained for the admiration of the achievements of man by viewing him in the modern biological order rather than in the "ontological order" of former times; in other words, by viewing man, not as created a little lower than the angels, but as evolved from a protoplasmic cell.

The scope and duration of instruction in medical studies has in recent years been greatly extended, so that now the course of medical instruction is equal, in time at least, to the quadrennial academic course, and must at no distant day be regarded as conferring upon the one who pursues it intelligently and faithfully the highest type of a properly denominated liberal education. As the world grows in wisdom it must come to be recognized more and more that the "proper study of mankind is man." To prosecute that study with intelligence requires a previous training and grounding in the better parts of the academic course.

Then, too, from the view-point of mental discipline, the medical course is second to none. This assertion will strike the ordinary academician as preposterous, who, however, being wholly ignorant of the medical aspect of the matter, can no more properly judge of the merits of the case than he can, in the seclusion of his study, determine the depths of the ocean. Huxley, the master mind of the nineteenth century, said: "There is no side of the intellect which it ("a thorough study of Human Physiology") does not call into play, no region of human knowledge into which either its roots or its branches do not extend; like the Atlantic between the Old and New Worlds, its waves wash the shores of the two worlds of matter and of mind." And this is said of a single branch of the science of medicine. Add to this such subjects as physics, chemistry, general biology, bacteriology, therapeutics, pathology and diagnosis, and surely the mastering mind will not become enfeebled through lack of exercise.

If disposed to quibble, we might in turn call in question the advisability of certain academic modes of mental discipline; but for the present we shall be content to venture the query whether the mathematical training required for entrance to our standard medical colleges is not all the mathematical training that is profitable for the general well-being of the mind. Gibbon tells us that he "relinquished forever the pursuit of the mathematics" as soon as he "understood the principles." He further says that he did not "lament that he desisted, before his mind was hardened by the habit of rigid demonstration, so destructive of the finer feelings of moral evidence, which must, however, determine the actions and opinions of our lives." The incapacity of professional mathematicians for dealing with problems of mixed uncertainties is notorious. Robert Stephenson, of lasting fame as a mathematician and the designer of the tubular bridge, raised high the hopes of his constituents by entering parliament, but proved to be signally deficient in dealing with the complex and uncertain affairs of state. We would, however, not advise the ordinary youth to repress, through fear of injury to the brain, any moderate inclination he may have for the pursuit of mathematics; but on the contrary, we would strenuously recommend to all who have inclination and opportunity for profitable study to pursue with vim and vigor not only mathematical studies, but also the whole academic course, and particularly the ancient classical languages, even a rudimentary knowledge of which, if thorough, must be of service in every walk of life, and especially in the study of medicine.

From all these and from other considerations not now to be discussed, we are pleased to regard a thorough medical education, in its unprofessional aspect, as the one most deserving to be considered liberal; and we venture to predict that ere the end of another century the degree of M. D. will enjoy the social preference long given to the degree of M. A.

THE Annual Meeting of the Alumni Association of Cleveland College of Physicians and Surgeons will be held in the new college building on Wednesday, May 1st, 1901, at 2 p. m., with the following program:

Address.....N. S. Everhard, M. D., President of Association.
 Response.....R. J. Lawlor, M. D.

The Alumni Retrospective and Prospective.. G. W. Crile, M. D.
 Roll Call of Classes.....H. B. Ormsby, Sec.-Treas.

Graduation exercises will be held in the evening at First
 Methodist Church, at 7:30 o'clock. Banquet following.

Can we not expect you to be present?

Society Proceedings.

May L. Bassett, Medical Reporter.

CUYAHOGA COUNTY MEDICAL SOCIETY,

Regular Meeting February 7, 1901.

The regular meeting of the Cuyahoga County Medical Society was held on Thursday evening, February 7, 1901, in the Library building. In the absence of the President, Dr. F. E. Bunts was elected President *pro tem*. The minutes of the last meeting were read and approved, and Dr. Frank E. Simonds elected to active membership. The resolution introduced by Dr. Bunts at the last meeting to appropriate \$100 from the surplus funds of the Society to the Cleveland Medical Library was carried unanimously. On motion a committee was appointed to draft and publish resolutions upon the loss by death of two of its members, Dr. H. J. Herrick, one of the Society's former Presidents and oldest members, and Dr. W. H. Nevison, who had been a member since 1896. The President appointed Drs. Quirk, Tuckerman and Stuart.

Dr. H. B. Herrick presented a case of neuralgia of supra-orbital nerve in which various forms of treatment had been employed and giving but very temporary relief.

Dr. Tuckerman: I would like to inquire whether the patient has been put on heroic doses of the iodides. I have just met a case in which the castor oil treatment had proved a complete failure. I gave large doses of iodide of potash (half an ounce in 24 hours) and the pain ceased. I have found that sometimes in these obstinate cases of pain it will relieve.

Dr. Quirk: I believe guiacol in glycerine applied locally has proved to be of some benefit in these severe cases of neuralgia.

Dr. Bunts: I would like to say a little from the surgeon's standpoint. I was talking with one of Chicago's most prominent surgeons at the American Medical Association last year with regard to the removal of the Gasserian ganglion for neuralgia, and I was quite surprised when he said he had never found it neces-

sary to perform this operation in any of his cases, and he was very much in favor of the castor oil treatment. Perhaps his cases may have been classed among the especially favorable ones, for I know that all cases are not cured by the castor oil treatment. But where all remedies have failed, I believe the surgical operation is the only means of relief. It is certain that the removal of the supra-orbital and infra-orbital bring temporary relief, and this operation may bring permanent relief where the neuralgia is not of the severe epileptic type. One of the most severe and frightful cases I have ever seen was relieved by the removal of Meckel's ganglion. Relief was not permanent, however, lasting only a year, and the neuralgia returned in the inferior dental, and relief came from removal of that, and then the neuralgia returned again, spreading over the whole side of the face. He subsequently had the Gasserian ganglion removed and was completely relieved. Another case which I recall was that of a man of about 76 years of age, on whom I did the operation recommended by Cushing of the Johns Hopkins University, and though I had severe hemorrhage and was obliged to use intravenous injection and it looked as though death was staring the man in the face at the time, yet he recovered. I had a letter from him recently in which he said that he was entirely relieved. Another case which was operated upon by my associate, Dr. Lower, was completely relieved.

I am in favor of the removal of the Gasserian ganglion in these cases rather than Meckel's. Meckel's ganglion can be removed with less danger, I know, but the operation does not always bring permanent relief, while removal of the Gasserian ganglion usually does, and the greater risk in the latter is small beside what is suffered in the former if relief be not secured. I would rather take the risks than submit to the suffering.

Dr. Tuckerman presented a specimen and reported a case of ectopic gestation. He said: It is not often in ectopic gestation that we are able to obtain the fetus, but in this case I am about to report we were fortunate enough to find a somewhat damaged fetus, and I wish to present it here tonight for your inspection. I was called to the case by Dr. A. D. Campbell a week ago Thursday, and found the patient much exsanguinated, so much so that, considering the place in which I found her and the facilities for operation, if we had attempted to operate we should have had in all likelihood a death on the table. She was practically pulseless when first seen, but under general stimulant treatment and intravenous saline injections, gradually recovered so that last Wednes-

day at St. Alexis hospital we removed a mass of clots from Douglass' pouch and the right tube, which had ruptured. This fetus was afterward found in one of the clots with its membranes. The left tube was closed at the fimbriated extremity and attached to a cystic ovary. These were removed and the tube was found to contain a cheesy pus in small amount.

The history of the case was that she had taken with a diarrhoea and was sitting on a chamber expecting a motion of the bowels when she felt a cutting pain in the right side in the utero-ovarian region. The pain was so severe that she fainted and was found lying unconscious on the floor. Dr. Campbell was called at once and he found her so exsanguinated that he feared he could not get over her shock, and I thought when I saw her that he was correct, but she recovered as related.

Dr. O. B. Campbell: How long did you wait before operating after the pulse came up?

Dr. Tuckerman: It was several days after the pulse came up before we operated—we operated last Wednesday.

Dr. Bunts: How old was the fetus?

Dr. Tuckerman: Two months; that is, she had missed two turns, but I do not mean therefore that the fetus was necessarily two months old.

Dr. Quirk presented a specimen with the following report: This is an epithelioma which I removed from a man about two weeks ago. It was between the shoulder blades. Microscopic sections showed it to be an epithelioma. It is a Jacob's, or rodent ulcer. On looking up the literature of the subject, I find that only two cases are recorded of a Jacob's or rodent ulcer in so unusual a place; only two, except upon the face or some portion of the head. One is reported by Dr. Jonathan Hutchinson and was on the forearm, and the other by James Barry, on the arm.

Dr. Bunts: Did this epithelioma start in a wart or mole?

Dr. Quirk: Yes, it probably started in something of that kind. The man can only say that he first noticed a small lump at this point. It was probably either a papilloma or a mole, more likely the latter.

Dr. Hunter Robb: Was there much hemorrhage?

Dr. Quirk: Yes, there was considerable hemorrhage. It was very vascular.

Dr. Bunts: I have a case which I wish to report on account of an interesting history rather than because this specimen is of any particular interest. It is a papillomatous cyst of the ovary.

I have brought the specimen to show some of the papillomatous structures within the cyst. The history is interesting, and there were several interesting points in the differential diagnosis. I do not know all of the history, but the woman had a child about eleven months previous to this time at which the doctor decided that she should wean the child, and following that, without any particular previous symptoms, she had a phlebitis, and she was told that she had a milk leg, due to weaning the child. Accompanying this she had severe attacks of fever and pain in the abdomen, and by and by a mass could be felt in the pelvis, and she was then told that the blood in the vein had accumulated in the pelvis—I presume it was called a hematocele or something of that sort. The case went on this way for several weeks, the symptoms being confined to pain, some constipation and marked areas of rigidity in the abdomen—particularly on the right side, though to some extent on the left side also. On both sides a lump could be felt. I first had the case referred to me by Dr. Sawyer. The patient then had a temperature of 101 degrees and looked as though she might be septic—was very much emaciated, slightly yellow, and I was inclined to think she had a pus cavity somewhere, especially as I could get a good deal of fluctuation by pressing the mass down in the abdomen during vaginal examination. Taking into account the history, I thought it might be that she had a suppurative pelvic cellulitis. I strongly urged her to go to the hospital, and she finally went, but when we put her under anesthesia upon the table the case looked different. I could still feel the fluctuation. There was a mass on the right side extending above the umbilicus and a bunch on the left, and I was forced to conclude that I might be mistaken, for it was not like any pus collection I had ever seen. I put her back to bed and decided to think it over. After careful consideration, the only thing that suggested itself to me was that it was a case of encysted tubercular peritonitis. There was a marked leucocytosis of from 18,000 to 23,000, and it looked as if there was pus, especially as the leucocytosis was continuous. I finally concluded that it was an encysted tubercular peritonitis. I thought the masses I could feel were simply adhesions. So I operated under this impression. I found this papillomatous cyst, very large, and with adhesions in all directions to the intestines and abdominal walls, which I peeled off, and on the left side and attached to the parietal peritoneum and to the descending colon there was a large mass which proved to be papillomatous. This adhered so that I peeled it off

in handfuls. I took out as much as this jar full. It looked as if something had ruptured from the left ovary. I found the descending colon was also covered with this papillomatous material from the flexure of the colon down, and I took the colon and stripped it off in handfuls. The patient suffered a good deal from shock, and I filled up the abdomen with normal saline solution. She has had a normal temperature ever since and to all appearances is getting well, but today on examination I found that on the left side she is becoming rigid again. Whether it is a peritonitis or a new growth I do not know, but if it is the latter it is growing very rapidly. She has scarcely any fever, about 99 degrees, and that also makes me feel afraid that it is a return of the growth.

Dr. Campbell: If it grows again, will it grow from the peritoneum?

Dr. Robb: If the papillary growth is of a malignant nature and is distributed on the peritoneum, the disease will in all probability recur wherever fragments have become implanted. The history of the case would certainly suggest malignancy.

Dr. Bunts: Of course it is not necessarily a malignant papilloma, though it may be malignant.

Dr. Tuckerman: I don't think Dr. Bunts is the first man to make a mistake in diagnosing tubercular peritonitis.

Dr. Bunts: I think encysted tubercular peritonitis is more often discovered accidentally than found by a diagnosis.

Dr. Tuckerman: I have seen two cases only of tubercular peritonitis which were not discovered accidentally. I had one case in which I was at first a good deal puzzled, but had made a diagnosis by exclusion and called in a specialist and he operated. It was a short time before my vacation, and just before I left town I called on the patient, then convalescent, and she said to me: "Doctor, you have been my trusted physician for years, and why did you let me come within three days of death without turning me over to the doctor?" I think that there are few more puzzling questions than the differential diagnosis between tubercular peritonitis and some of the conditions which, like these in Dr. Bunts' case, so closely simulate it in symptoms and physical signs.

Dr. Hunter Robb read a paper on "Two Cases of Brain Tumor in Gynecological Practice.

Dr. W. Stern: I would like to ask Dr. Robb what are the probable first causes in these cases?

Dr. Robb, in answer to Dr. Stern's question: This is among the things which one cannot always explain. The cause of death

was probably due to the pressure of the cyst contents on either the respiratory or cardiac centers, or upon both.

Dr. Tuckerman: There is one practical point to be borne in mind in these cases, and that is that when they complain of pain and a physician gives a hypodermic of morphia, sudden death may occur, as happened in one case that had left St. Alexis Hospital and gone home, in which a physician gave a hypodermic for headache and the patient very promptly died.

Dr. Quirk read a paper on "Spontaneous Fracture of the Humerus Due to Sarcoma, with History of a Case and Presentation of Specimen." This paper appears in current issue of the *GAZETTE*.

Dr. W. Stern: I would like to ask Dr. Quirk what the urinary findings were. Was there any report?

Dr. Quirk: The urinary findings were normal, and here I have the report of the findings for two weeks previous to death, reported by Dr. Moore. It reads as follows: "Acid spc. gr. 1010. Chemically negative. Microscopically a few epithelial cells and leucocytes." I examined the urine on several different occasions and could find nothing abnormal.

Correspondence.

AM BORD DES SCHNELLDAMPFERS "AUGUSTE VICTORIA,"

DEN 9TH FEBRUARY, 1901.

Editors Cleveland Medical Gazette.

GENTLEMEN:—At present we are in latitude 34 deg. 17 m., longitude 11 deg. 35 m. W., which locates us off the coast of Africa on a straight course from the Madeiras to Gibraltar. We left New York on January 31st with the sun shining but a wind blowing cold enough to make a heavy overcoat necessary. That night we encountered moderately rough weather, which continued for several days. The history of those days I will not detail. I would fain forget them. In youth I was well initiated into seafaring and later renewed my acquaintance with the elements. But that availed nothing. I must be reinitiated. I have tried many remedies for seasickness, succeeding best with hypodermics of strychnia and atropine. I once kept it off by these drugs during a whole passage, but was seasick three weeks after landing. So this time I resolved to have it out, literally and figuratively, and be done with it. Well, after we had fed the fishes sufficiently they rocked the boat less violently. Passengers returned again

to the dining rooms three times a day, or ate and drank from three to five times a day ondeck; and then many were seized with that mania for pacing the decks, which becomes epidemic on every steamer. I wonder that some Yankee has not invented a treadmill or a capstan arrangement with gear connecting with the propelling wheels so that the wasted force of impatient passengers could be utilized. I made a calculation what 320 passengers, many of whom are able to propel a bicycle from five to 100 miles a day, could do toward increasing the ship's speed, but I forget the figures now.

On the morning of February 7th we found ourselves steaming quietly along in plain sight of the beautiful mountainous island of Maderia. The island is of volcanic formation but covered with verdure as green as emerald, and has some peaks as high as 6,165 feet, sloping steeply into the sea. We cast anchor at Funchal, the largest town in these Portuguese islands, which together have a population of 120,000. It is situated on one of those steep slopes facing southward and has a mild and equable climate, which has made it for many years past a winter resort for asthmatics and consumptives, mostly from England. It is said the temperature ranges between 63 and 75 degrees F. The vegetation is semi-tropical. The houses are in Portuguese style, generally of stone plastered over, and with tile roofs and balconies. The streets are narrow, as crooked as can be, many of them, and all exceedingly picturesque. They are paved with small stones closely set on edge and washed clean by rains or mountain brooks. The people are Portuguese—one of the weak branches of the decadent Latin race. Beggars are innumerable and importunate. I would like to make some observations about this begging vice, which seems to affect more or less the entire Old World, and is not by any means confined to people of low degree, but it would make too long a story. The means of transportation in Funchal are decidedly peculiar. The freighting about town (of coal, for instance, which is all shipped here from England, or of fire-wood) is all done upon the simplest kind of sledge to which a pole is attached, and drawn by a pair of bullocks wearing a badly shaped yoke. Passengers are drawn by bullocks upon wooden sleds with iron-shod runners, and a top like a surrey, with side curtains. These sleds are dragged over the pavements, up hill and down. The oxen are led by a shouting boy and driven by a man with a goad and frequent maledictions, and the sliding of the sled is facilitated by occasionally placing a bag of grease in front of the

runners for them to pass over. One of the largest and finest streets, the Camin de Monte, is so steep that walking up, or especially down, it is very laborious, and sleds are regularly employed by the citizens and by tourists to slide down the hill, which proved to us upon trial a novel and very exhilarating mode of rapid transit. The bullock car, while equally odd and diverting, was not so rapid. These means of transportation are almost as primitive as those of our plains Indians, who lash tepee poles at each side of a pony so that the poles drag behind and are loaded with poor Lo's worldly goods and possibly with his papooses. In pre-Columbian days, when there were no ponies, I suppose the squaws dragged the poles, or carried the family property on their backs as they did the firewood and the papooses. I have seen nothing else to equal these sledges intended for use on dry land excepting the "stone boat" of the Pennsylvania farmer and the "slide car" of some parts of Ireland. One is led to speculate whether they are retained merely through general lack of progress in civilization as we consider it, or because the sledge, the sled and the bullock car have certain advantages adapting them to use upon these slippery, hilly, sidling, crooked streets.

My attention was attracted by the sign "Post Medico" displayed over the entrance to a large stone plastered building on the main plaza of Funchal. Approaching, I saw another sign which read something about "Consultorio Medico Municipal." I scented a hospital or dispensary. I tried the door, but it was locked. At another entrance to the same building I saw several young men standing with books under their arms, and some instinct told me they were medical students. I asked them what was in the building. Not a word of English could they understand. I borrowed one of their books, and looking into it found it to be a work on Physiology, in Portuguese, translated from the French of Duval. I was hot on the trail of a medical school. By the use of pantomime and a little of the Spanish language, which resembles Portuguese, I made the students understand that I wanted to see the place, and they stirred out the old porter, or janitor, and showed me a dispensing room furnished with shelves and drugs, and two other rooms like lecture rooms. This seemed to be the college outfit, and when I asked for the hospital they took me upstairs and found a Catholic Sister, who proved to be the Sister Superior and who spoke voluble French and very little English. But the sister was very polite and obliging and, she guessing at my English and I guessing at her French, we

got along famously. It seems there are six Franciscan sisters here, French, Belgian and Portuguese—missionaries of Mary. They have come here but recently, I understood, and found the hospital in a very bad condition when they came. The sister conducted me through the hospital. She thought the building was about 200 years old, but had been much repaired. The wards were very large and lofty, and the walls and ceilings immaculately white. The light was sufficient, but there was no means of ventilation excepting the windows. The hospital is divided into men's side and women's side. On the men's side were a medical ward and a surgical ward, each with ten beds, and a venereal ward with eight beds. On the women's side the medical and surgical wards each contained sixteen beds and there was also a room for accouchement, containing four beds. They have about one accouchement a week. All the wards were fairly filled. For instance, the women's medical had twelve patients. I saw no case that would appear unusual in Cleveland except one woman, a very dark-complexioned Portuguese of perhaps 35 years, who was suspected of leprosy. She was in the women's ward for diagnosis. There is also a venereal department kept separate from the general hospital and treating a great many patients yearly, at present twelve. It is said there are more illegitimate than legitimate children in Funchal. The house staff at St. Isabel's consists of one doctor, a graduate of the medical department of the Portuguese University at Coimbra, and two students of the medical school here. There are three doctors on the hospital staff. One, the surgeon, educated in France, and the other two from Coimbra. These three also constitute the faculty of the medical school. Two of them do most of the teaching. The other seldom comes. There are forty students. They have a four years' course, the session extending from October to July, but consisting largely of holidays, every Saint's day and festival season being celebrated from one day to three weeks at a time. The Sister Superior, who had received her training in Paris, conveyed to me the idea by her remarks, accompanied by innumerable and inimitable shrugs and deprecatory gesticulations, that she considered this a very poor medical school, an exceptionally bad medical school, in fact, a perfectly absurd medical school, or words to that effect; and I was quite ready to agree with her in that opinion, although, judging from some of the cases in the hospital, the professors were quite competent practitioners. It so happened that I did not meet any of the doctors, as even the

interne was away at the time of my visit. Going about the town I found it quite difficult to obtain information, as so few of the natives spoke English. We might have visited the consuls or English residents, but our stay was short. There are six English doctors in Funchal, four of them educated in England and two in Germany. A couple of years ago there were an American doctor and an American dentist stayed here eight or nine months, rather for their health than for anything else. The dentist did a good deal of business.

The weather at Funchal was like April at home, or May, as to temperature. Flowers are blooming and gardens flourishing. At the present hour it is colder and raining. We expect to be at Gibraltar tomorrow morning.

If these lines are somewhat wavering and ideas hard to find, pray consider the vague and generally relaxed condition that follows *mal de mer*, and do not allude to the fact that excellent wine is made in Madeira.

SAMUEL W. KELLEY.

Cleveland, O., March 11, 1900.

Editors of the Cleveland Medical Gazette:

Gentlemen:—We would call your attention to our *specialty* in the line of nursing, viz., "Visiting Nursing."

It is our purpose to carry out the idea advanced in the November, 1900, issue of THE CLEVELAND MEDICAL GAZETTE—fill the needs of the physicians and surgeons, caring for their patients as the conditions require, by giving service to several cases, visiting each case once, twice or thrice daily, and leaving records of temperature, pulse, etc., for the doctor.

There are many patients who need some care and attention from the hand of a trained attendant, yet do not demand or can ill afford her constant surveillance.

Our experience in hospital and private work, in both medical and surgical cases, has been varied and of some years.

Fees will be charged by the hour or call according to the work required or the patient's circumstances.

All calls of this nature extended to us will receive our prompt attention.

Hoping this system will meet with favor and co-operation, we remain

Yours truly,

M. E. YATES,

E. E. SPENCER.

Notes and Comments.

Dr. A. M. Webster, of Lorain, was in the city on 22d March.

Dr. O. L. Maynard, of Elyria, attended Cleveland Medical Society on 22d March.

Dr. T. B. Breck, of Hudson, attended Cleveland Medical Society on 22d March.

Dr. Allport, of Streetsborough, attended Cleveland Medical Society on 22d March.

Dr. Robert E. Swigart, who was located at 1105 Detroit street, has removed to Tiffin.

Dr. J. P. Boyd, of Akron, attended Cleveland Medical Society meeting on 22d March.

Dr. Henry S. Upson returns on April 1st from a six weeks' vacation at Tallahassee, Florida.

Dr. J. J. Thomas has removed from 667 Hough avenue to his new residence at 156 Crawford Road.

Dr. W. S. Hart, of Elyria, listened to Dr. Musser's address at the Cleveland Medical Society on 22d March.

Dr. H. G. Sherman will remove his office, on April 1st, from 29 Euclid avenue to room 736 Rose Building.

Dr. H. E. Handerson has been spending the winter months at New Orleans, he will return to Cleveland about the 15th of April.

Dr. Paul M. Mecray, surgeon at the Cooper Hospital, Philadelphia, has been appointed surgeon and physician to the Pennsylvania Railroad Company, to succeed Dr. Dowling Benjamin.

Dr. Michael R. Pigott, passed assistant surgeon in the United States navy, died suddenly at the Naval Academy in Annapolis on January 31. Dr. Pigott was a graduate of the University of Virginia, and was thirty-five years old.

Dr. R. A. Witthaus, of New York, will have to sue for his bill for examining the stomachs of Mrs. Catherine J. Adams and Henry C. Barnett, which he made on the direction of the district attorney in the Molineaux case. His bill amounts to \$18,550.

Dr. Charles F. Hoover, president of the Cleveland Medical Society, was held up by two footpads on the evening of March

6th and relieved of his watch and \$60 in money. The incident occurred on Sibley street, quite near the doctor's home at 835 Case avenue.

Just as we go to press the GAZETTE receives a letter from Dr. S. W. Kelley written in Constantinople on 12th March. This letter, which is very interesting, will appear in the May issue of the GAZETTE. Dr. Kelley expects to return to Cleveland about the 11th April.

Dr. Almon G. Bruce. of Albion, Mich., the recent president of the Alumni Association of the Cleveland College of Physicians and Surgeons, died on February 9th of apoplexy. Dr. Bruce was a graduate of the old Charity Hospital Medical College in the class of 1870.

Dr. John H. Musser, of Philadelphia, gave a very interesting address on "Streptothrix Infection," at the twenty-second quarterly meeting of The Cleveland Medical Society, on Friday evening, 22d March. The following morning he held a clinic at Lakeside Hospital, which was well attended.

Dr. Keene to Travel.—Dr. W. W. Kean has asked for one year's leave of absence from his duties at the Jefferson Medical College in order to take a trip abroad which will probably extend around the world. Dr. Keen will start on his journey immediately after the meeting of American Medical Association in June, and will return to resume his teaching and practice in September, 1902.

Dr. Daniel Lewis Appointed State Health Commissioner.—Dr. Daniel Lewis, of New York city, who has served on the New York State Board of Health since 1895, having been its president for three years, has been appointed State health commissioner by Governor Odell under the recently enacted law which substituted a single-headed commission for the State board of health. His salary is \$3,500 annually.

The next regular meeting of the Lorain County Medical Society will be held in Wellington, at 2 p. m., Tuesday, 9th April.

On Tuesday evening, 9th April, a Charity Ball will be given in the interests of the Cleveland General Hospital. The Assembly Room of the Chamber of Commerce has been engaged for the occasion.

Smallpox is epidemic in Glasgow, more than 100 cases being in hospital.

It is reported that there are six cases of smallpox in the infirmary at the University of Virginia.

A Doctor Fined for Issuing a False Death Certificate.—A Brooklyn physician has been fined \$100 for filing a false certificate of death in a case of smallpox.

It is said that the cost of drunkenness to the city government in Paris amounts to 2,000,000 francs per annum. The hospital statistics furnish the basis of this calculation.

American Medicine, Dr. Gould's new journal, is well under way and promises soon to appear. The scheme of financial organization seems to have met with every encouragement.

Beer Scare and Drinking.—The scare in England about arsenic in beer has done more for the cause of sobriety in a week or two than the combined efforts of all the temperance societies in a number of years.

A site for the Oakland Medical College has been selected at Thirty-first and Grove streets, Oakland, Cal., measuring 80x115 feet. Architects are at work preparing plans for the erection of a substantial modern structure.

Miss M. Evelyn Yates and Miss E. Edith Spencer, graduates of the training school for nurses at the Cleveland General Hospital, are devoting their time to "visiting nursing." They are located at the Champ, on Willson avenue.

Sand Filtration for Washington Water Supply.—The Senate Committee of the District of Columbia has recommended the adoption of a system of filtration through sand, supplemented by a series of sedimentation basins in which, during periods of excessive turbidity of the water, the use of coagulants can be carried on. It is estimated that this latter step will be necessary about one-eighth of the time.

Lateral Curvature from Division of the Spinal Accessory Nerve.—A girl of 14 years old had had glands removed from the left side of the neck six months before. There was a spinal curvature toward the right with drooping of the left shoulder, paralysis and atrophy of the trapezius and marked disability of the left arm. The patient declined an operation for uniting the ends of the spinal accessory nerve, which had evidently been severed at the point where it pierced the sterno-cleido-mastoid muscle.

Submersion of Children with fever in a warm bath for several minutes frequently will give relief which is invariably satisfactory. —*Med. Summary.*

As a result of the recent yellow fever experiments, a campaign of extermination has been undertaken in Cuba. Forty inspectors are to report all the breeding places of mosquitoes, and petroleum will be poured once a month upon all such pools.

An interesting phase of the close attention of the State and city boards of health to the animals and meat at Calverton is the development of evidence that most of the "boneracks" go as canned meat at first-class prices to Uncle Sam's soldiers.

Parties of medical students in Chicago are taken three times a week to the Isolation Hospital to study smallpox. This is right, and might be done in other cities not only without present danger, but to the material reduction of danger from smallpox in future.

According to the Boston Medical and Surgical Journal the coroner's jury expressed their verdict upon the death of Murray Hall, the Tammany politician, in the following language: "Murray H. Hall came to his death from natural causes. He was a lady."

Several State legislatures are considering legislation to regulate the practice of medicine. The Christian Scientists are very much in evidence in opposition to every attempt to bring them under any sort of restraint or accountability. They have not offered any reason why they should not conform to the simple requirements which ordinary men and women easily meet.

The headquarters of the Association of Medical Librarians have, since December 8, been established at the Library of the Medical and Chirurgical Faculty. This association, which was organized by Dr. George M. Gould, has been in existence for two years, includes now twenty-one public medical libraries, and is receiving applications for membership from the remoter parts of this country, from Canada and Europe. Its chief purpose is to furnish an exchange whereby medical libraries may dispose of duplicates in advantageous manner. The growth of private libraries may be fostered in the same way, and owners of private libraries may become members. Dr. Merrill of the Surgeon-General's Library, Washington, and Dr. Fisher of the College of Physicians, Philadelphia, are, with Dr. Gould, the executive committee.

The board of health of Columbus, O., has begun the weekly medical inspection of prostitutes. The contract physicians who have been making such examinations for some of the houses of prostitution are objecting on the ground that it interferes with their practice.

Rohe Memorial.—The Rohe Memorial Committee has engaged Sculptor Ephraim Keyser to make a bronze portrait tablet of Dr. Rohe. The committee proposes also to establish in the library of the medical and chirurgical faculty a Rohe alcove, consisting mainly of works on hygiene.

Influence of Alcohol on the Brain.—Mr. Victor Horsley, reviewing the facts in regard to the influence of alcohol on the brain, shows that it is a depressant, though there may be a temporary increase of activity. From a scientific standpoint, he believes that it can not be true that small doses of alcohol such as people take at meals have practically no deleterious effects. Total abstinence must be the course, if we are to follow the plain teachings of truth and common sense. It is the part of the scientist to point this out, and the part of the politician to adopt it as a whole. —*Med. Times.*

Female medical students, says the *Journal of the American Medical Association*, have been admitted to the German universities this year, and 618 have attended the lectures, but only nine have thus far entered as regular students. The women are even favored above the men at present, as certain work at a foreign university is credited to them in the State examinations. In Austria the authorities have decided to admit women also, on the same terms as men in every respect, with the new scholastic year. Among the 850 students at Zurich, 214 are women, and 128 of these are studying medicine.

First Aid to the Injured.—The annual meeting of the Society for Instruction in First Aid to the Injured was held recently in New York city. The annual report, which was read by President Charles H. Marshall, shows that over 13,000 persons had been instructed by the society since its beginning. Word was received from Fire Chief Croker that he hoped his men would have the usual instruction this year. President William H. Baldwin, Jr., of the Long Island Railroad, wrote that the instruction given to the employes of the road last year was very beneficial.

McGill University, which has received many millions from the generous citizens of Montreal, beginning with the splendid endowment of Hon. Peter McGill, has been further enriched. It was announced at a meeting of the Board of Governors on March 15th that Sir William C. Macdonald, who has already given the institution over \$2,500,000, made another donation of \$150,000. Of this sum \$75,000 will be taken to endow the chair of chemistry, the occupant of which is now Prof. Harrington; \$62,500 for the chair of botany, Prof. Penhallow, and \$12,500 will be added to the endowment of the chair of physics, Prof. Cox. By reason of this gift \$150,000 of the university funds now used for these endowments will be released and applied to the improvement of the arts curriculum.

Mr. Paul Lafleur has been appointed associate professor of English literature and Dr. Herman Walter, M. A., Edinburg, professor of modern languages, Royal Academy Institute, Belfast, has been appointed lecturer in modern languages.

Still another gift was also announced, Miss Jessie Dow having given \$60,000 for a chair of political economy, in memory of her uncle, the late William Dow.

Preliminary Programme of the Ohio State Pediatric Society.

The annual meeting of this Society will be held in Cincinnati, 7th May, beginning at 2 p. m. and continuing through the evening and next forenoon until the program is completed.

The Society will meet in the Convention Hall, Grand Hotel: Grand Hotel will be headquarters of Society.

PAPERS.

1. "Phlyctenular Conjunctivitis."
S. C. Ayres, M. D., Cincinnati, O.
2. "Pemphigus Neonatorum."
A. Ravogli, M. D., Cincinnati, O.
3. "Infantile Nourishment."
George M. Clouse, M. D., Columbus, O.
4. "The Necessity of a More Perfect Aeration."
H. H. Spiers, M. D., Ravenna, O.
5. "Bloodless Reduction of Congenital Hip Dislocation."
Walter G. Stern, M. D. Cleveland, O.
6. "Chorea."
James H. Taylor, M. D., Indianapolis, Ind.
7. "Criminals and Defectives, How to Reduce Their Numbers."
J. R. McCally, Dayton, O.
8. "Dosimetric Medication in Pediatric Practice."
M. Borts, M. D., Cleveland, O.

9. Subject not yet announced.
R. S. Gaugler, M. D., Dayton, O.
10. Subject not yet announced.
H. J. Whitacre, M. D., Cincinnati, O.
11. "Ohio Institution for Feeble Minded."
G. A. Doren, M. D., Columbus, O.
12. "Coal Tar Derivatives in Childrens' Diseases."
J. B. McGee, M. D., Cleveland, O.
13. "Acute Intestinal Obstruction."
F. F. Lawrence, M. D., Columbus, O.
14. Chronic Intestinal Obstruction with Report of a Case."
D. S. Hanson, M. D., Cleveland, O.
15. Subject not yet announced.
E. W. Mitchell, M. D., Cincinnati, O.
16. "Purulent Ophthalmia in the New-born."
Edward Lauder, M. D., Cleveland, O.
17. Subject not yet announced.
G. W. Moorehouse, M. D., Sparta, O.
18. "Malignant Diseases in Children, with Report of a Case."
J. V. Kofron, M. D., Cleveland, O.
19. "Strumous Keratitis and Conjunctivitis."
Derrick T. Vail, M. D., Cincinnati, O.
20. "State Provision for the Care and Treatment of Crippled Children."
Frank H. Darby, M. D., Columbus, O.

COMMITTEE OF ARRANGEMENTS.

F. V. Fitzpatrick, M. D., Cincinnati, O.; E. W. Mitchell, M. D., Cincinnati, O.; Magnus A. Tate, M. D., Cincinnati, O.; Bertha L. Glaeser, M. D., Cincinnati, O.; Frank B. Cross, M. D., Cincinnati, O.; Estelle M. Riley, M. D., Cincinnati, O.; D. S. Hanson, M. D., Secretary.

Two years ago when the Klondike fever was at its highest point, one man saw the necessity of establishing living places for the many who were bound to those gold-laden regions. He conceived the idea of making small houses of aluminum, and carried out his idea by having sheets of proper size made for shipment there. Possibly that was the first time aluminum entered in this way into house construction. The lightness of the white metal, combined with the manner in which it could be stored away, had recommended itself as being superior to any other material for the purpose desired.

At the Pan-American Exposition visitors will have the opportunity of seeing a small building made of aluminum. Aluminum is manufactured at Niagara Falls with the use of the electricity generated there in large quantities. Niagara Falls is the principal aluminum manufacturing place in the world, and the white metal is a product of the two principal factories located

there, current being taken from both of the great power companies

This Pan-American structure that is to be made of aluminum will be located in the Manufactures and Liberal Arts building. In shape it will be octagonal, and it will be as large as can be built in a space 15 feet square. The height will be about 22 feet, and it will be made of No. 24 sheet. The architecture will resemble the Spanish Renaissance, practically the same style adopted for the buildings of the great Exposition. Its lines will be graceful and there will be beauty about it that will win new admiration for aluminum. No doubt the presence of this building at the Exposition will suggest numerous ideas to inventive minds whereby aluminum in similar sheets may be utilized to add to the lightness and beauty of various structures. Pure aluminum is so white and silvery in appearance that it will be hard for many to believe that the building is not a genuine silver palace. It will be a new spectacle in the architectural line, and old as well as young will be interested in it. During recent years the price of aluminum has been so reduced that it has now reached a point where it comes in close and successful competition with several of the other cheap metals. This is why it enters into the manufacture of so many articles, the display of which at the Pan-American Exposition will excite much favorable comment.

The skeleton of the largest extinct animal known has been put together for the exhibit of the National Museum at the Pan-American Exposition. The name of this monster is the *Triceratops*. It was found in Missouri, and will be one of the most curious things shown in the Government building. It is, of course, the only one in the world. Besides this colossus of the animal kingdom, there will be a number of specimens with which the public is more or less familiar.

In the collection from the Philippine Islands, which was made especially for the Pan-American by the late Col. Hiller, will be a large number of curious and new specimens found both in the sea and on the land of these, our latest possessions.

In the Department of Anthropology there will be a large exhibit bringing forth the leading phases of human effort and progress. Naturally much attention has been given to the native American peoples, and there will be a clear and symmetric presentation of race history from the whole field of Anthropology. Among the more important subjects illustrated are the discovery of the use of fire, and the making of it by artificial means.

The tools and utensils employed by men in the various arts will be arranged in a series, beginning with the simplest and ending with the highest. A large group illustrating the evolution of the various kinds of weapons from the simplest to the latest improvements will be shown. There will be a complete and very interesting exhibit of ceramics.

There will also be a large collection of musical instruments, beginning with the primitive reed pipes to the most delicate modern instruments. There will be a large collection of Indians, life-size, in plastic cast, pursuing the various avocations in vogue from the discovery of America to the present time.

In the Department of Geology there will be a large collection of minerals, rocks and ores which will be of especial interest to the scientist.

The exhibit of the Smithsonian Institution will be installed in the same space with the exhibit of the National Museum, both coming under the same jurisdiction. The origin of the Smithsonian Institution will be an item of interest in this connection. It was founded by James Smithson, an Englishman, who left his estate, valued at \$550,000, to the United States Government to establish in Washington an institution "for the increase and diffusion of knowledge."

The Congress of the United States has placed certain bureaus of the Government under the direction of this institution. These are: The United States National Museum, The Bureau of International Exchanges, The Bureau of American Ethnology, The National Zoological Park, and the Astrophysical Observatory.

Among the interesting things that will be exhibited by the Smithsonian will be handsome pictures and books pertaining to the institution, and the portraits of the distinguished secretaries, all three of whom stand deservedly high in the estimation of the world. These are: Prof. Joseph Henry, Prof. Spencer Fullerton Baird, and Prof. Samuel Pierpont Langley. There will also be large and comprehensive representation of the Aerodrome, one of the most celebrated inventions of Prof. Langley, which, if successful, will revolutionize travel and enable us to fly rather than to travel through the air at great speed and without great danger. Prof. Langley is sanguine of ultimate success.

After about two thousand experiments on animals, English investigators have decided that dilute hydrocyanic acid is the quickest and most efficient antidote to chloroform poisoning. A full dose should be dropped from a drop-tube on the back of the tongue.—*Journal of Medicine and Science.*

Counter-Irritants.

A Saving Clause.

"Dr. Pocus, do you approve all these don't worry theories?"

"Well, I always like to have my patients indulge in a little healthy anxiety about paying my bills."—*Exchange*.

A Bright Diagnosis.

"Skinner got a bill the other day for his wife's automobile drives, and he's been laid up ever since."

"What's the matter?"

"The doctor says he's suffering from an overcharge of electricity."—*Life*.

The Coming Delusion.

The bibulous head-waiter of the big hotel went anxiously to consult his physician.

"Doctor," he said, "I've got 'em sure this time!"

"See snakes, do you?" asked the doctor.

"Snakes? No! I see men in shirt waists—hundreds of them!"

Out West.

Broncho Pete: Say, Bill, what d' y' think o' that young doctor what's jist come here fr'm d' East? Think thar's any stuff in 'im?

Brawny Bill: Sure. Ain't he a doctor? Aw, he's killed his man all right.

Reciprocity.

"I hear that Jones treated his family doctor very badly."

"So I heard. I suppose he thinks that turn about is fair play."

Disinterested Advice.

Winks: What advice did the doctor give you when you went to him this morning?

Blinks: He advised me to go to some other physician to whom I didn't owe \$25.—*Answers*.

Second-Handed Food.

The Grocer: Yes, sir, this grano-grino is the best breakfast food on the market. It is predigested.

Mr. Fadsby (shuddering): Bless my soul! By whom?

Regard for Health.

Mistress: This water has a queer taste.

Careful Servant (who has heard much scientific conversation): It's all right, mum. There ain't a live germ in it, mum. I run it through the sausage-cutter.—*N. Y. Weekly*.

Following Directions.

Richard: What's got into Billy? He goes in bathing half-a-dozen times every day.

Robert: The doctor advised him to take a drink of whiskey upon coming out of the water.—*Boston Transcript.*

A Case of Necessity.

"Did the chemist find anything wrong with the milk?"

"What a foolish question! He was looking for deadly germs, wasn't he? Well, he couldn't afford not to find them."—*Chicago Record.*

One Reason for It.

She: Why do physicians write their prescriptions in Latin?

He: To make their patients feel that they are getting their money's worth.

An Unusual Compliment.

"So Skinflint paid the doctor's bill without a murmur?"

"Yes. He was pleased to find somebody who placed so high a value on his life."—*Life.*

How Shocking.

The choicest of precious gems, the emblem of purity, the pearl, is now asserted to be only a urinary calculus, the sad ailment of a gravelly oyster!

An Aquatic Remedy.

Johnny Roach: What is Dacey swimming in and out of that old rusty milk-can so much for?"

Catty: To get more iron in his system. Dr. Carp said he looked too white around the gills."

Expecting Heart Failure.

Friend: How long did the doctor give you to live?

Patient: I believe he sends out his bills on the first of January.—*Harper's Bazar.*

The following is an exact copy of an epitaph on a tombstone in a New Hampshire cemetery. It explains itself:

"Ruth Sprague, dau. of Gibson and Elizabeth Sprague. Died Jan. 11, 1816; aged 9 years, 1 mos. and 3 days.

"She was stolen from the grave by Roderick R. Clow and dissected at Dr. P. M. Armstrong's office, in Hoosick Falls, from which place her mutilated remains were obtained and deposited here.

"Her body dissected by fiendish men,
Her bones anatomized,
Her soul we trust has risen to God,
A place where few physicians rise."

THE Cleveland Medical Gazette

MAY, 1901.

Original Articles.

BACTERIOLOGY AND PATHOLOGY OF DIPHTHERIA.*

BY ROGER G. PERKINS, M. D., CLEVELAND.

As a preliminary to any discussion of the bacteriology and pathology of diphtheria, it is essential to define sharply the present status of opinion as to what lesions must be included under that head. Ever since the discovery of the Klebs-Loeffler bacillus and the subsequent elaborations of its relations to pathological processes, it has become necessary to classify under the head of "diphtheria" not only the more familiar membranous inflammations of the tonsils, pharynx and larynx, but also all inflammatory lesions of whatever kind or location, which are definitely caused by this bacillus.

The organism grows readily on suitable media, and is very resistant to the ordinary vicissitudes of bacterial life. Although it dies in a short time in absolutely dry dust, it has been shown that it may remain for months alive and capable of transmission, on various articles which have become contaminated by it.

The infection may be transferred in the following ways: From persons actually suffering from the disease, from convalescents in whose throats the organism is still persistent, and from healthy persons in whose throats the organism has found temporary lodging, though they themselves have no sign or symptom of the disease, a state of affairs not infrequent among hospital physicians and attendants in diphtheria wards.

Contagion may also take place through the more indirect medium of objects or substances which have been inoculated in any of the preceding ways. Positive cultural results have been obtained from clothes, curtains, children's toys and other objects,

*Read before Cuyahoga County Medical Society, Cleveland 7th March, 1901.

at various periods after their use by infected individuals, or contact with sources of infection. Although milk is a favorite culture medium, and has often been suspected of being the agent of transmission in epidemics, there are as yet no cases reported in which these suppositions were absolutely confirmed. There are, however, several instances on record of positive cultural results from suspicious vessels and containers, and one instance where the organism was found in cheese from a suspected dairy. Nevertheless, the circumstantial evidence furnished by the English and the Ashtabula milk epidemics of diphtheria offer conclusive proof of this mode of transmission of the disease.

The most frequent points of infection are the tonsils, on which the formation of the membrane often begins simultaneously at several points and from which it may spread to the uvula, the pharynx and the other tissues in the neighborhood. It may, however, occur primarily at any part of the mouth or throat, and even at the angles of the lips, as seen in several cases in Charity hospital in the past twelve months. Extension to the larynx, as well as primary involvement of that organ, is among the best known and most dreaded conditions of the disease. The nasal passages are also often affected, though here the disease frequently passes undiagnosed. It may occur in this locality without membrane elsewhere, or may be an extension from disease lower down, but in the majority of cases of laryngeal or pharyngeal diphtheria, positive cultures can be made from the nose. It must also be remembered that there is a form of chronic rhinitis due to the bacillus of diphtheria, "rhinitis chronica diphtheritica."

A sufficient number of cases have been reported by competent observers to make the Klebs-Loeffler bacillus a recognized etiological factor in pseudo-membranous inflammations of the external genitalia, and also of open wounds, usually in conjunction with faucial diphtheria, but sometimes, though rarely, as a primary infection; also in otitis media and mastoiditis, by direct extension along the Eustachian tubes, and sometimes by further extension through a ruptured membrane, in membranous inflammations of the external auditory meatus. It is also seen in conjunctivitis, and frequently in the broncho-pneumonias associated with severe cases of faucial diphtheria, though rarely in pure culture. Finally, isolated cases of diphtheritic inflammations of the uterus, and of the endocardium of the heart valves have been observed.

In the great majority of cases the organism is present only locally, and produces constitutional effects often out of all seeming proportion to the extent of the lesion by the absorption of its toxine, which has been determined to be a tox-albumen, but whose chemical composition is as yet unknown. Inoculation of this toxine, even when completely freed from all living organisms, gives rise to much the same symptoms as does inoculation of the organism itself, though it is said that the formation of a membrane is dependent on the presence of the bacilli and does not occur when they are absent.

But although its main action is that of a toxæmia, rather than a bacteriæmia, it has been found in the inflamed lymph glands, in the pneumonic areas, and even scattered throughout the blood and organs, forming a true bacteriæmia, though occurring only in small numbers.

The bacillus of diphtheria is not usually found in pure culture but is ordinarily associated with the ordinary pyogenic micrococci. *Streptococcus pyogenes* is perhaps the most frequent companion, especially in adenitis and broncho-pneumonia, but the staphylococci also are often met with.

The pathogenicity of the organism for the lower animals is variable; guinea pigs are specially suitable for experimental purposes and show lesions very similar to those of human beings.

An accurate diagnosis of diphtheria is not possible from gross appearances and constitutional symptoms. There are many cases of diphtheroid angina, and of pseudo-membranous exudates of the vulva and elsewhere which may closely simulate diphtheria, but which are caused by organisms other than the Klebs Loeffler bacillus, usually *Streptococcus pyogenes*. On the other hand, many cases of tonsillitis and pharyngitis, which are definitely diphtheritic in origin, escape notice on account of the mildness of the symptoms, though other persons may be infected from them with the severest forms of the disease.

Diagnosis from coverslip preparations from the inflamed areas is often possible to the practiced observer, especially in laryngeal cases, though he will rarely commit himself definitely without resorting to the culture tube and thermostat. In general, however, it may be said that coverslips showing a preponderance of slender, polar staining bacilli are sufficient warrant for the administration of antitoxin without further delay.

Diagnosis from cultures on suitable media, maintained at body temperature for fourteen hours or over, is fairly satisfactory.

The difficulties to be encountered are the overgrowth of the diphtheria colonies by other organisms, and the possible presence of the pseudo-diphtheria bacillus, which is non-pathogenic, but only to be distinguished from true diphtheria by minor cultural and staining reactions. In the preparation of cultures from the membrane it must be remembered that the exposed surface of the exudate, especially if it be of some standing, may fail to show diphtheria bacilli, though these may be present in large numbers in the deeper layers. The swab should therefore be rubbed over the advancing edge of the membrane, as bacilli will usually be found at this place, if anywhere.

It is well, at this point, to recall that a considerable number of competent bacteriologists regard the diagnosis of diphtheria by the ordinary culture test as attended with considerable difficulties and as by no means the easy matter it is so commonly believed to be.

One can usually in favorable cases, however, be reasonably certain that a given culture is diphtheria in a few hours, but the other side of the question is far from simple. It is certain that, in many cases, pseudo-diphtheria bacilli are mistaken for true diphtheria bacilli by incompetent observers. We are of the opinion that Neisser's staining test should be applied in all cases in which there is the least doubt. It should be remembered that a positive diagnosis of diphtheria can be made in two ways only, (1) by the culture test, and (2) by the antitoxine test. In our opinion the latter should be instituted in all doubtful and severe cases without waiting for the results of the culture test.

The morbid anatomy of diphtheria may be considered under three heads:

1. The local inflammatory conditions and the direct extension of the process.

2. Lesions in other parts of the body, due to the action of the toxine, and occurring in the course of the disease.

3. Later manifestations of the action of the toxine, becoming evident after convalescence has set in.

1. At the seat of infection there is more or less œdema and swelling with the formation of an exudate, which is usually firm and tenacious, but may be granular and friable. The underlying tissues undergo necrosis of greater or less degree and as the cell destruction progresses, the necrotic material is added to the exudate, often giving it a laminated structure. The amount of fibrin and of leucocytes is very variable, though they are always present

in some degree. In advanced cases the tissue may become gangrenous, and the sloughing may be so extensive as to open into the carotid artery. The process may spread slowly, or with great rapidity, and may extend down through the larynx and trachea into the bronchi of the fourth degree, or up into the nares, or through the Eustachian tubes into the middle ear and may be of sufficient thickness to completely close any of these passages. It may also extend throughout the mouth and even out upon the cheeks.

The lymph glands in the neighborhood are affected in severe cases, and may undergo complete necrosis. Broncho-pneumonia is also a frequent complication and does not differ in type from broncho-pneumonias in other diseases. In one instance, the diphtheria bacillus has been demonstrated in a case of ulcerative endocarditis.

2. The various organs show the usual changes seen in acute infectious diseases. In severe cases, areas of cell necrosis can be found in the liver, spleen and kidneys, and in the mesenteric glands and the solitary glands of the intestines. The kidneys usually show some grade of parenchymatous degeneration, and often a definite acute nephritis, which may clear up or go on to chronic nephritis, as in scarlet fever. Degenerations of the heart muscle are not infrequent and may be the cause of sudden death, either in the course of the disease or during convalescence.

3. The post-diphtheritic paralysis, usually multiple in character, and occurring usually in the second or third week of convalescence, is due to a toxic neuritis, resulting from the absorption of the poison. It may be general or local, affecting almost any set of nerves and is not dependent in degree on the severity of the local disease, some of the most serious cases occurring after attacks so mild that they were not considered as diphtheria.

Inoculation of susceptible animals with small doses of the toxin obtained from virulent cultures, produces an acquired immunity against the disease, which immunity can be raised to a high degree. The serum of such animals contains a substance which possesses the power of neutralizing the toxine, either outside the body or in it. The strength of this substance, known as "antitoxine," varies directly as the grade of immunity possessed by the animal from which the serum is drawn and acts as a specific of great efficiency when introduced into the system of persons suffering from diphtheria. In itself it contains no organisms, but bacteria other than diphtheria may grow in it readily, as seen in the recent tetanus outbreak in Italy.

Diphtheria is probably the best understood of all the infectious diseases and can therefore be most scientifically combated. The isolation of those suffering from the disease is more carefully attended to, year by year, and the disinfection of material is more and more thorough. But the danger lies in the failure, from whatever cause, to recognize the disease in its milder forms—which are as contagious and as dangerous to others as those which are self-evident. With accurate diagnosis of cultures from all suspected cases, administration of antitoxin in all severe and doubtful cases, and strict isolation and disinfection of people and objects infected with the Klebs-Loeffler bacillus, there is no reason why the bacteriology and pathology of diphtheria should not in time become a matter of historical interest only.

THE DIFFERENTIAL DIAGNOSIS OF DIPHTHERIA.*

BY EDWARD PERKINS CARTER, M.D., CLEVELAND.

The presence of diphtheria in all our large cities, in an endemic form, associated with the outbreak of scattered, isolated cases which, under certain conditions, may be readily confused with a simple tonsillitis, scarlet fever, and less commonly other acute infections, renders the question of differential diagnosis a most important one, clinically as well as bacteriologically.

Although in many instances the diagnosis may be simple, circumstances constantly arise in which it is extremely difficult to arrive at a definite conclusion regarding the actual nature of the attack under observation.

The occurrence of the false membrane in the pharynx, and not infrequently, the coincident development of a transient, toxic erythema in diphtheria, closely resembling conditions seen in scarlatina. Naturally its occurrence epidemically, and the history of contagion, if it can be obtained, is invariably of great help in establishing the diagnosis of a doubtful case.

As a rule the onset in diphtheria is less abrupt, and the constitutional depression frequently more pronounced than in scarlet fever, the actual attack being preceded by a period of two or three days, during which vague subjective symptoms may be complained of. While in scarlatina, on the other hand, the abrupt onset and the pronounced initial symptoms are commonly the first indication of the threatened infection. In the very young convulsions may mark the onset of both diphtheria and scarlet fever.

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As a rule but little information can be gained from the early appearance of the buccal, or pharyngeal mucous membrane, which is reddened and congested, lacking, however, in diphtheria and tonsillitis, the characteristic mottling of the scarlatinal enanthem—frequently so much more easily described than actually seen. While the tonsils in any event are usually swollen and inflamed; and may show at this time plugging of their crypts, or even small patches of superficial membrane. The early appearance of a membrane upon the tonsils by the first or second day of illness, yellowish-gray to grayish-white in color, punctate, or patchy in distribution—frequently having the so-called “pepper-box” appearance—is, in the absence of any erythematous rash, or other symptoms pointing to scarlatina, extremely suggestive of diphtheria or tonsillitis.

That, however, too great reliance can not be placed upon the clinical appearance of the angina must be admitted, and the bacteriological evidence of the presence of Klebs-Loeffler bacilli—when available—remains alone the final proof of the existence of a true diphtheria.

Unfortunately in rare instances even this proof may be wanting in the presence of true diphtheria, and in such cases the necessity of arriving at a positive diagnosis is indeed urgent, and the danger of confusion often great; or again the laboratory diagnosis may be positive, when the clinical picture is one of an extremely mild tonsillitis, facts which but emphasize the value of a closer relationship and a better appreciation in the interpretation of the clinical and the laboratory diagnosis.

In a recent study of 1,962 cases of diphtheria, Burrows (J. F. “A Clinical Study of Diphtheria,” *Am. Jnl. Med. Sc.*, 1901, vol. cxxi., No. 2, p. 131) has reported 228 instances in which, in spite of the presence of a membrane, Klebs-Loeffler bacilli failed to grow in cultures from the throat or nose, until after its disappearance. In such cases when, in addition to the local pharyngeal and constitutional symptoms, a diffuse dark—or lighter—scarlet erythema appears upon the trunk, extending rapidly over a more or less limited area, frequently fading where first seen as it advances, or disappearing only to reappear again, the diagnosis in the absence of bacteriological proof may be unusually difficult. In these instances the color of the eruption often darker than the scarlatinal rash, its situation, subsequent development and irregular distribution, together with the absence of the punctiform character, seen in scarlet fever, may serve to distinguish it from the latter

disease. In a series of 1,778 cases of diphtheria reported by Richardiere (*Rev. Mens. des Malad. de l'Enfance*, 1900, Aug. and Sept., p. 407) eruptions occurred in 198 cases, following five distinct types, of which the scarlatiniform was the most frequent.

As characteristic early symptoms of a typical scarlatinal infection, which may be of value in determining the diagnosis, we have during the first twenty-four hours the abrupt onset, associated with more or less constitutional depression, headache, the scarlatinal enanthem, sore throat, and often early and persistent vomiting, which, according to von Leube, is an initial symptom of the greatest diagnostic value, occurring more often in this disease in childhood than in any other, with the exception of pneumonia. With the development of the characteristic eruption accompanied by the enlargement of the superficial lymphatic glands, there can be no doubt as to the nature of the infection. In the absence, however, of one or more of the initial symptoms, the appearance of an eruption closely resembling scarlatina may give rise to great confusion, while an anomalous development of the rash, associated with any one of the early symptoms, may lead to equally great uncertainty.

As a diagnostic point of great value, and as peculiarly characteristic of scarlet fever McCollom emphasizes the importance of the early injection and enlargement of the papillae at the tip and edges of the tongue. In an analysis of 1,000 cases, according to this observer (*Boston City Hospital Rep.*, 1899, X, S. p. 34) "this enlargement is a constant symptom, and has not been absent in any of the 1,000 cases observed, and in many instances it was the basis of the diagnosis." He further describes two forms of this enlargement; one in which the papillae look very much like small grains of cayenne pepper sprinkled on the tongue, and a second in which the papillae are larger but not markedly reddened. The strawberry tongue is simply an exaggerated form of this early enlargement. In doubtful cases the early enlargement of the superficial lymphatic glands is perhaps significant. Schamberg (*J. F. Ann. of Gyn. and Ped.*, Boston, 1899, vol. xiii, p. 39) in a clinical study of the lymphatic glands in a hundred cases of scarlatina says, "in differentiating the rashes of diphtheria from true scarlet fever, the study of the glands is perhaps of inconsiderable value. A well marked enlargement of all the superficial glands, particularly the epitrochlear and axillary would in doubtful cases, tend to throw the balance in favor of scarlet fever." Finally the far greater tendency to invade the larynx, and the much greater liability to the

occurrence of paralyses following true diphtheria; the occurrence of desquamation, and the susceptibility to severe renal inflammation in scarlatina, are of value in distinguishing clinically between the two diseases. In this connection it is interesting to note that Henoch (*Vorlesung. u. Kind'k'h'*, Berlin, 1899, p. 665) has never seen oculomotor, or palatal paralyses following a scarlatinal angina, these accidents having been observed, in his experience, only in those cases complicated by a true diphtheria.

The clinical and bacteriological evidence of the co-existence of diphtheria and scarlet fever, has long since been well established, and it is an interesting fact that when scarlet fever is the secondary invader it develops usually early in the attack of diphtheria, while rarely the scarlatinal sore throat is first seen after complete subsidence of the diphtheritic angina; when, however, diphtheria is the secondary invader, this complication occurs as a rule later in the course of the disease, after disappearance of the scarlatinal angina.

Under circumstances admitting of exposure to both infections, exceptions of course occur, and true diphtheria may complicate early scarlatina.

In a bacteriological study of 117 cases of scarlatinal angina Lemoine (*Gas. des Hop.*, 1895, Dec., p. 1449) found the streptococcus alone in 93, and streptococci together with Klebs-Loeffler bacilli in but five. Out of 2,093 cases of diphtheria admitted to the Boston City Hospital during a period of two years (see Burrows loc. cit.) 131 proved to be mixed infections with scarlet fever. All of these cases had characteristic and severe attacks of diphtheria, and in but few cases had the diphtheritic throat entirely cleared before the appearance of the scarlatinal angina. McCollom (loc. cit., p. 26), in his analysis of 1,000 cases of scarlet fever already referred to, says there is no doubt that a scarlet fever patient is particularly susceptible to diphtheria, but the reverse of this is not true, and yet in this series diphtheria bacilli were obtained in but a comparatively small number, in 11.75 per cent of the cases having a membrane diphtheritic in appearance, and in 14.4 per cent of those without the presence of a definite membrane.

Occasionally the development of a rash following antitoxin in supposed diphtheria, may so closely resemble the eruption of scarlet fever as to add great confusion and make a diagnosis temporarily impossible.

In view of the difficulties so frequently surrounding the differential diagnosis of diphtheria from scarlet fever, and the ob-

vious draw-back in waiting for the late developments or sequelae of either infection, though often with their occurrence it is first possible to reach a positive conclusion as to the nature of the attack, Osler has well said (*Pract. of Med.*, N. Y., 1895, II. Ed., p. 78), "in a case presenting widespread erythema, and extensive membranous angina with Loefflers bacillus, it would puzzle Hippocrates to say whether the two diseases co-existed, or whether it was only an extensive scarlatinal rash in diphtheria."

In a typical acute follicular tonsillitis, with the early well known and characteristic distribution, *limitation*, and color of the exudate, or membrane, and with a history of repeated attacks, the clinical diagnosis may well agree with the bacteriological; while in the severer forms associated with a pseudo-membrane—streptococcus tonsillitis—in the absence of a bacteriological examination, only the distribution of the membrane, or course of the attack renders the diagnosis clear, and what has already been said in reference to the importance of bacteriological proof, in the judgment of the writer, applies even more forcibly here.

The early characteristics of a true diphtheritic membrane, its patchy distribution, grayish-white color, slight haemorrhage and erosion on removal, may be present in tonsillitis, particularly in the severer pseudo-membranous forms, or indeed be wholly absent in a grave diphtheritic infection.

With the presence of a membrane its subsequent development is often of far greater value, as an aid in the clinical diagnosis, than its peculiar character. Its frequent and rapid extension to the pillars of the fauces, and uvula; its invasion of the larynx, or extension upwards to the posterior nares, and finally the occurrence of paralyses, as already noted, would in doubtful cases throw the balance in favor of diphtheria. Happily with the modern laboratory methods, one is not forced to wait the development of sequelae, or of subsequent characteristic cases in the same household, before arriving at a diagnosis, for in any event a positive diagnosis of diphtheria can only be made by the demonstration of Klebs-Loeffler bacilli in the suspected pharynx, and every case of tonsillitis in which there is any uncertainty, should be watched carefully and treated as suspicious until it has been shown by bacteriological evidence that it is not diphtheria.

8 Hayward street.

ANTITOXIN IN DIPHTHERIA.*

BY P. H. SAWYER, M. D., CLEVELAND.

In accepting the request to prepare a paper on "Antitoxin in Diphtheria," I did not expect to present the statistics given to prove the value of Antitoxin in the treatment of this dreadful and destructive disease.

The recent address delivered by Dr. Emmet Holt before the Cleveland Medical Society and published in the December number of the *Cleveland Journal of Medicine* would make the work one of needless repetition. In that address Dr. Holt says that, "Nothing is so convincing as personal experience,"—and to this I propose to limit what I have to say on this subject.

The results of my observation lead me to believe, with Dr. Hare, that, in diphtheria, we have in Antitoxin a remedy superior to all other remedies combined. So well am I convinced of this that if I were compelled to choose between a suitable dose of Antitoxin administered at the right time, and the services of the most skilled practitioner among us without it, I would unhesitatingly choose the former. My first experience with its use began in October, 1898, in the case of a child aged five, the second in the family to be attacked. I was called a few hours after the illness began. Both the local and constitutional symptoms were of a severe type. The tonsils, pillars of the palate and fauces were covered with the membrane and there was also a large patch on the uvula. Temperature 103 degrees. I injected 1,000 units of Antitoxin and, somewhat to my surprise and greatly to my relief, there was a complete arrest of the spread of the membrane and a rapid subsidence of the fever and general distress. The membranes softened, became looser, and soon disappeared, leaving the mucous surface in normal condition, with a rapid and complete recovery following. The same result has followed in all the pharyngeal cases I have treated, and accord with the statements of Sajous's Annual of 1899, page 612. The ages of the children thus treated have been from the infant of eighteen months to the child of ten years old. When called early no other treatment has been used and usually only two calls have been necessary. The weak point in this testimony is that in many of these cases no bacteriological examination has been made, which should be done under favorable circumstances, but as several cases occurred among those who could ill afford it, it was thought wiser to proceed upon as careful a diagnosis as could be made from the symptoms and appearances.

*Read before Cuyahoga County Medical Society, Cleveland, 7th March, 1901.

During the last two years I have had to do, either as consultant or attending physician, with eight cases of laryngeal diphtheria. They have all been treated with Antitoxin in doses of from 2,000 to 5,000 units. Seven of them recovered and one died. Three of them were in extremis and were intubated. I believe that if the one who died had been intubated he, too, would have lived. In all these cases the nose and pharynx were seriously involved. Five of them recovered without sequelæ; two in whom the administration was delayed from four to five days, suffered, no doubt, from streptococcic poisoning. A little girl four years old had rheumatic pain; almost suppression of urine, passing only two ounces in 24 hours and containing a large amount of albumin. Paralysis of pharynx or palate followed, and it was months before she regained complete enunciation. A little boy had bronchitis and extreme heart weakness as a sequel to his attack. These two cases illustrate the necessity of early diagnosis and prompt use of the remedy, as when so used we shall have very few of these troublesome and dangerous after-claps. Urticaria followed its use in about one case out of ten, which has served to annoy the child, frighten the parents, but no other evil consequences have followed.

In forming conclusions as to the value of Antitoxin, they rest on the following facts: 1st. The immediate arrest of the formation and spread of the membrane in those cases under inspection. 2nd. The healthy condition in which it leaves the mucous surface. 3rd. The rapid convalescence. 4th. The absence of dangerous sequelæ. We infer the same processes take place in the larynx and trachea from the fact that many cases recover when no other treatment is used, that intubation is less frequently called for, and the percentage of recoveries much larger than before its use. In looking back over my experience I am confident that if the eight cases of laryngeal diphtheria had been treated by former methods there would have been at least seven deaths instead of seven recoveries. This accords with the general statistics.

In regard to dosage, the most I have used in one case was 5,000 units for a little girl four years old. In other cases from 1,000 to 3,000 units have been used, according to the severity of the case. My opinion accords fully with those who insist upon the early administration of the Antitoxin in order to secure the best results. But if for any reason this is not done, it should be given later, for good, if not the best results may be anticipated.

I have used it in immunizing doses in twenty cases, all, except one, escaping, the exposure in most cases being slight. In the cases of four children thoroughly exposed, all escaped. This of course is not at all conclusive, as no one can say that exposure in any given case or number of cases will result in contraction of the disease.

You will pardon me if I recall the rough-and-tumble fights we used to go into back in the early sixties, with our cauterization, our astringents, the more or less forcible removal of the membrane, and with some the application of blisters externally, to be followed by new foci of infection. Our constitutional treatment was much better, as we early saw the need of support and stimulation; yet despite our best efforts, whole families would sometimes be swept away and the death rate was fearful. Contrast it with the present method in the use of Antitoxin, and the profession may feel gratified over the results now attained, and confidently hope for still better as the conditions for its use are more fully understood.

LARYNGEAL INTUBATION IN DIPHTHERIA.*

BY JOSEPH V. KOFRON, M. D., CLEVELAND.

Visiting Physician to St. Alexis Hospital.

The very brilliant operation of laryngeal intubation, which was first introduced to the profession in 1858, by Bouchut of Paris, only to be severely criticized, and finally discarded, was revived in 1880, gradually improved and elaborated, and finally successfully demonstrated to the profession by the late Dr. Jos. O'Dwyer, of New York City, deserves to be classed as one of the most noted achievements of nineteenth century medicine. At the present time, with the aid of antitoxine, it is recognized as one of the most successful therapeutic weapons we possess in the treatment of diphtheritic laryngeal dyspnoea. While in the early stages of its present development, it was pointed out as a difficult procedure, to be undertaken only by a select few, it was nevertheless a matter of only a short time before it was thoroughly demonstrated by a number of the profession as not only most practicable, but a procedure extremely fitting; for up to this time there was no alternative, it was either to perform, providing the consent of the parents could be obtained, the bloody operation of tracheotomy or let the patient die, and the words of Rosenthal

*Read before Cuyahoga County Medical Society, Cleveland, 7th March, 1901.

best express what became of most of the patients at that time as he states, "Before I practiced intubation a recovery from laryngeal diphtheria was rare, and fully 95 per cent of my cases died. Since adopting intubation the mortality has been reduced to 62 per cent, and I am, therefore, an enthusiastic advocate of the new operation."

Although intubation is at present accepted and practiced by members of the profession throughout the world, it certainly has its most numerous enthusiasts and advocates in this country, and it is today probably oftener resorted to by the profession of the United States than that of any other country. Though we must admit that it is chiefly done by the specialist and seldom by the general practitioner, I express the hope that the time will come when there will be a very few unable to intubate, and my sentiments upon this point are well expressed by Trumpp, of Munich, who, while giving his views and a favorable report upon intubation, concludes by urging all general practitioners to familiarize themselves with the technic, and be ready to practice this whenever required, and the earlier the better; and in an indirect way Dr. Waxham, after entering upon a discussion as to the proper time for the operation, says: "It does not often happen that the operation is done early, as it is generally performed by the specialist who is called in as a last resort. I believe it can be safely said that the operation is more frequently performed too late, to give the best chance of recovery, than too early."

In the first Dr. Trumpp emphasizes the point, that the technic be acquired by the general practitioner, and Dr. Waxham points to the fact, that the operation, because usually done by the specialist who is called in as a last resort, is usually done too late, to give the best chance of recovery, than too early. If that be true, then why not urge general practitioners, or, more properly, why not start in the proper place and teach the undergraduate, for are we not dealing with one of the most treacherous and fatal acute diseases known to medicine? While it is true that at times this condition may not demand immediate interference, and that the patient will tolerate even considerable delay, there are on the other hand times when prompt interference may become imperative, and when a matter of only a few hours, nay, minutes, may mean life or death. It is because of this most important fact that it is necessary for the general practitioner to be able to intubate, and I will frankly say that I can see no valid reason why the undergraduate should not be taught the procedure, and be obliged

to show his proficiency in the art of intubation before he is given his diploma which shows him prepared to practice medicine and surgery; and I am sure that if this is done there will be more general practitioners able to intubate than there are now, while intubation will be done earlier and consequently there will not only be severe suffering promptly relieved but many more lives saved.

While there is no doubt that since the advent and almost general use of antitoxine the mortality of intubated cases has been markedly reduced, as well as the time of intubage shortened, and that intubation is not as frequently required as formerly, there nevertheless will always be some cases requiring intubation, and it is for the benefit of these that I wish to consider a most important point, and that is, when to intubate.

O'Dwyer himself showed and emphasized the fact that there are sometimes cases of severe laryngeal dyspnœa that will get well without intubation, and this fact is also conceded by all operators of experience; but it has also been emphasized and statistically proven that the results, as to the length of time of intubage, as well as to mortality, are far better in early than in late operations, and here I wish to quote Dr. Holt, who says: "One should never wait for general cyanosis, for often this does not occur until just before death. It is better to operate too early than too late," and Dr. Waxham says: "It often becomes a nice question of judgment as to when to interfere surgically. Shall we operate early with the first symptoms of laryngeal invasion, or wait until it is evident that the patient must die unless given relief?" I wish to say that if we operate early we will do so in many, in these days of antitoxine, that would recover without operation. On the other hand, if we operate late after the patient has become comatose and unconscious, we will *lose cases that would recover otherwise*. While there is no one symptom, or group of specific symptoms, which would enable us to arrive at a decision as to the best time to intubate, I believe one is justified to intubate in the following conditions:

I. When dyspnœa is accompanied by a dry stridulous, embarrassing, suffocating cough, indicative of considerable irritation, or when cough becomes suppressed.

II. When dyspnœa is not relieved by previously administered antitoxine.

III. When dyspnœa is increasing in severity.

IV. When dyspnœa is accompanied by an irregular, rapid, easily compressible radial pulse, or when the pulse becomes imperceptible.

V. When restlessness is increasing even if dyspnœa is not alarming.

VI. If spasmodic attacks of dyspnœa come on at intervals.

VII. If cyanosis occurs.

Certainly, if we have the group of dangerous symptoms present, as loss of voice, stridulous cough, urgent dyspnœa, restlessness, rapid compressible pulse, or imperceptible pulse with cyanosis or pallor, the operation becomes imperative and will tolerate no delay. Therefore, it is our duty, if we have early charge, not to allow our patient to reach a hopeless stage, but to prevent it by prompt interference, which we have seen is far better if done too early than too late.

Aside from the *well known* and important facts as to the reason why the operation is usually delayed, there is one that deserves most prominent mention, and that is, that the operation is considered by the average general practitioner as a very dangerous one because of the liability to fatal accidents, and is therefore considered justifiable only as a last resort. While we must admit that there is some danger in intubation, the real danger does not exist to such a degree as has been impressed on the average general practitioner, and the late statistics will readily prove that the fears entertained upon this point are in a great degree unwarranted. Dr. Trumpp's collected statistics show that in 5,470 intubations there were reported but 13 accidents, two deaths caused by sudden obstruction of the tube by membrane, and ten deaths from spontaneous detubage, and one in consequence of sudden reappearing stenosis after extubation. This shows about one accidental death to about 421 cases intubated, though on the other hand he shows that out of a total of 5,470 intubations there were 4,487, or 80 per cent, recoveries. These statistics could be multiplied, but all prove about the same results, and this, I think, is sufficient proof not only of the practicability and beneficial results of the operation, but also to dispel the unwarranted apprehension of extreme dangers.

TRACHEOTOMY AND ITS COMPARATIVE VALUE WITH INTUBATION.

It certainly cannot be assumed that tracheotomy is not a valuable operation, or that it is being entirely abandoned, far from that; while it is being gradually displaced by intubation in

the large majority of cases of diphtheritic laryngeal dyspnœa, it nevertheless covers a most important field and has a well established position in medicine. But it is today quite well agreed by the leading authorities that it is the operation of necessity, while intubation is the operation of election, and Dr. Holt, commenting on this point, says, "The use of antitoxine in the treatment of diphtheria has so shortened the period of stenosis that tracheotomy as a routine operation is hardly justifiable." The great superiority of intubation is now generally admitted, not only in America but all over the continent of Europe, where it has practically displaced the older operation; and, while I do not wish to burden you with statistics, I feel that the results claimed by Dr. Waxham are of special interest in connection with this point, as he says: "Out of 543 cases intubated, all in private practice, I had 215 recoveries, or 39.79 per cent; in my last 143 cases, 76 recoveries, or 53.14 per cent; and in my very latest 40 cases, 38 recoveries, or 95 per cent. Such a record I am convinced has never been reached by a single operator with tracheotomy in private practice."

The evidence here certainly shows that not only the *opinion* of the leading authorities is in favor of intubation in the large majority of cases, but it is also evident that the *practical results* obtained since the use of antitoxine are extremely satisfactory, and that the operation, if done early, will remarkably reduce the death rate. Finally, among the many advantages of intubation over tracheotomy claimed by O'Dwyer and which have been conceded by most men of experience, there is one that deserves particular mention, and that is, that there are usually no objections, on the part of the parents, to overcome. In my own experience this point has been often verified, and I am sure that intubation explained and proposed to the parents will *very seldom* be denied, while, on the other hand, I feel equally *positive* that tracheotomy explained and proposed will *seldom* be accepted. Certainly this one fact alone must be the means of not only preventing severe suffering but also saving many precious lives which would otherwise succumb to an untimely death, as was pointed out and quoted previously.

THE PULSE, TEMPERATURE AND RESPIRATION
AFTER OPERATION; FROM AN ANALYSIS OF
114 CONSECUTIVE ABDOMINAL SEC-
TIONS WITHOUT A DEATH.

BY HUNTER ROBB, M. D.

Professor of Gynecology, Western Reserve University, Cleveland, O.

In order to obtain some idea of what the average pulse, temperature, and respiration should be after an abdominal section, we have made an analysis of 114 consecutive unselected cases. We agree with the opinion most generally accepted by abdominal surgeons that the condition of the pulse is the most important guide in arriving at the prognosis in a given case. In some instances, however, although the pulse may be rapid, if the temperature remains about normal, and the general condition of the patient is good, recovery may take place. In our series of 114 cases the highest temperature was 103.9 degrees F., the lowest maximum temperature 99.5 degrees F., the highest average maximum temperature being 100.9 degrees F. The highest pulse was 160, the lowest maximum pulse 88; the highest average maximum pulse 111. The highest respiration was 44, lowest maximum respiration 22; the highest average maximum respiration 30.

In this series we had 29 pus cases. In a case in which the temperature goes above 103 degrees F., the patient should receive an alcohol sponge-bath, and an ice-bag should be applied to the head. We do not use antipyretic drugs except in rare instances. If the pulse is over 120 the sulphate of strychnine (gr. 1-30 to 1-20) may be given hypodermically every three to four hours, the frequency of the dose being increased if the pulse does not become better within the next 24 hours. If the respiration increases and is due to some lung involvement, the patient's chest and back should be enveloped in a cotton (non-absorbent) jacket. We believe that after having tried both methods of treatment after operation—the stimulating and the non-stimulating—that it is better to keep the patient somewhat stimulated. It would certainly seem probable that should septic infection develop, in the former case she would be in a better condition to overcome the depressing effects of the poison, than if heart stimulants were delayed until after the infection had begun. We give the patient, before she leaves the operating-room, an enema consisting of a pint of normal salt solution together with an ounce of brandy, 20 grains of carbonate of ammonia, and 1-30 gr. of sulphate of

strychnia. When she reaches the ward she is given the strychnine hypodermically, every three to six hours, according to the condition of the pulse, and more frequently if the rate is above 140. We have had such satisfactory results in employing this method of treatment as a routine that we can heartily recommend it.

ANIMATE BODIES IN THE AUDITORY CANAL.*

BY J. M. INGERSOLL, A. M., M. D.

Lecturer on Oto-laryngology in the Medical Department,
Western Reserve University, Cleveland.

Animate bodies in the auditory canal are rather unusual and are considered somewhat of a curiosity. If the insect is vigorous and active, its movements usually cause excruciating pain in the ear. If the ear is normal and the insect is small, the intruder may be held fast in the wax, and so cause no inconvenience; the patient may not even be aware of the presence of a foreign body in the ear. In such cases the foreign body usually acts as a nucleus around which the wax is deposited, and the insect is not discovered until the wax is removed, or the ear is examined for some other cause. Sometimes one of the hairs in the auditory canal, or a piece of hair from the head or beard, may be lodged in the canal in such a position as to give the sensation of something crawling or moving in the canal; especially when the patient is eating or talking, and such a condition may be easily overlooked, unless the ear is carefully examined with a good light. A very small insect may enter the canal and be hidden by a little wax, or by the curve in the canal, and so escape observation, but gentle syringing will remove it.

Foreign bodies whether animate or inanimate, imbedded in cerumen, may remain in the auditory canal almost indefinitely without causing any trouble. The greatest danger is from unskillful attempts to remove the body. No one instrument is suitable for all cases, but the safest and most useful instrument in the great majority of cases, is the aural syringe.

The Year Book of Nose, Throat and Ear for 1901, mentions the three following cases of animate bodies in the auditory canal reported during the past year. Dr. C. H. Lovewell found a bee imbedded in a mass of cerumen. The patient said that while he was

* Read before the North Central Ohio Medical Society, at Mansfield, March 29, 1901.

working on a farm in 1872, an insect flew into his ear. For three days the pain was very severe, and then subsided while he was asleep. He had suffered no discomfort since then and supposed that the insect had escaped. Dr. B. F. Church removed a live tick from the canal. The patient gave a history of having had a clawing sensation in his ear for two years, and the accumulation of cerumen and epithelial scales external to the tick, led Dr. Church to think that the patient's statement was correct in regard to the time that the insect had been in the ear. Dr. A. J. Holmquist reported the removal of three maggots from the ear.

The three following cases occurred in my own practice:

Mrs. S. came to my clinic at the Lakeside Hospital, and said that during the previous night an insect had crawled into her right ear. She could feel something moving in the auditory canal, and at times suffered severe pain, accompanied by noises that were almost unbearable. An examination of the right ear showed a small black insect crawling around in the bony canal. The insect was easily removed by means of a syringe full of warm water, and was found to be a bedbug.

The second case was a young actress who came to me in regard to a gradually increasing deafness in the right ear, secondary to scarlet fever. On each side just above the tragus, there was a congenital fistula auris; on the left side the fistula was about 1.5 c. m. deep; on the right side, there were two shallower ones with a common opening.

These two fistulæ contained a small amount of foul sebaceous material. According to Virchow, such fistulæ represent the incomplete closure of the upper branchial clefts.

In the right auditory canal, a dark brown striated body could be seen. With a pair of small forceps, I removed a cockroach. The roach's head was toward the drum membrane, showing that he had crawled into his living tomb, probably while the patient was asleep, for she had suffered no discomfort and was surprised and chagrined when I showed her the roach. There was no discharge in the auditory canal, so that the roach could not have been attracted by any abnormal condition there, but the exudate from the fistula was probably the thing which had attracted him to this region. After entering the auditory canal, he was held fast by the small amount of wax which was present, and died there.

It hardly seems possible that so large an insect could enter and remain in the canal without causing the patient some pain, but she had experienced none and had no idea how long the roach had

been in her ear. The deafness was due to a lesion in the middle ear and was not affected in anyway by the removal of the roach.

The third case was a laboring man who came to my clinic, suffering intense pain in his left ear. The auditory canal was filled with a squirming mass of small maggots, and several stray ones were wandering around over the auricle. The patient said that he had had a purulent discharge from his left ear for three years. Three days before he came to the clinic, he had lain down on the grass and gone to sleep. The following day his ear pained him and bled a little. On the morning of the third day he discovered some maggots on his pillow, and with his finger removed quite a number from the auditory canal and the auricle. With a syringe and warm water I washed out one hundred and sixty-nine maggots. Then the ear was dried and four more were removed with a pair of small forceps, making one hundred and seventy-three maggots altogether. The ear seemed to be clean then, and was dusted with nosophen powder. The patient was given a saturated solution of boric acid and absolute alcohol, with instructions to put five drops of the solution in his ear three times a day, and return for treatment of the otitis, but he never came back, so that I presume the maggots were all removed. Evidently while the man was sleeping on the ground, a fly had been attracted by the odor of the pus and had deposited her eggs in the auditory canal. Most of the maggots were placed in a vial containing 90 per cent alcohol, and at the end of three hours some of them were still alive and active. A few larvæ placed in a 1 to 1000 bichloride solution, were killed almost immediately, showing that if for any reason such larvæ could not be removed from the ear, a bichloride solution is much more efficient than alcohol in destroying them.

When one considers the extreme sensitiveness of the auditory canal and the drum membrane, the excruciating pain usually caused by an active insect in the canal, is not surprising, and the noise made by the insect's movements, particularly when it touches the drum membrane, is terrible. In such cases if the insect cannot be removed immediately by syringing the ear, the auditory canal should be filled with a heavy oil, which will interfere with the insect's movements and effectually cut off its air supply. Olive oil or albolene are among the best oils for such a purpose, but if they cannot be obtain at once, machine oil or any of the heavy oils, or even melted butter, may be used. After the insect has been killed in this way, there is no longer any need of haste in its removal.

Children frequently put beans or peas or pebbles or some other small objects into their own or each others ears, and the parents become alarmed, not on account of the pain which such things cause, but through fear that the hearing will be destroyed. Before making any attempt to remove such bodies, the ear should be carefully examined to determine whether or not a foreign body is in the auditory canal, and if one is present, to determine its nature and size and shape and position. By drawing the auricle gently backward and upward, the auditory canal is straightened, and if the sunlight is allowed to fall directly into the ear, a very good view of the canal and even the drum membrane can usually be obtained. If a foreign body is present it can be seen in this way without the use of a head mirror and aural speculum. Small bodies which do not fill the canal can be removed by gently syringing the ear. The auricle should be drawn backward and upward to straighten the canal, and the stream directed between the wall of the canal and the foreign body, so that the return current will force the body out. When the foreign body nearly or completely fills the canal, syringing would tend to force it inward. If it presents a smooth surface, a piece of twine may be teased out, covered with glue, and placed against the body and held in position by a cotton packing until the glue sets; removing the body then, by pulling on the twine. Dr. J. C. Macaskie reports the removal in this way of a piece of rubber, from the end of a leadpencil. If the body is rough and irregular, it may be grasped with a pair of small forceps and removed. Smooth bodies may sometimes be secured by carefully passing a fine tenaculum beyond the body, and removing it by traction. Instrumental removal of foreign bodies should not be attempted except under the most favorable condition in regard to light and instruments. It is better to give an anæsthetic than to injure the canal through the patient's unwillingness or inability to hold still.

If the body cannot be removed by careful manipulation through the canal, it will be necessary to detach the auricle and enlarge the canal posteriorly. Injury to the canal, through unskillful attempts to remove a foreign body, should be treated by cold applications until the inflammation subsides, unless there are indications for an immediate radical operation.

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Editorial.

COMMISSIONS.

There appears in the April issue of the *Cleveland Journal of Medicine* an admirable editorial entitled, "*Fees and Commissions—a Remedy.*"

While we do not altogether agree with some of the points brought forward by the editor, we are in entire sympathy with the principle involved, and heartily commend his attitude as a whole. That certain general practitioners are in the habit of importuning surgeons and specialists for a portion of the latter's fee, we know to be true. The practice is fortunately not yet

general, and the time to create a wholesome sentiment against it is in the beginning, before it has become more firmly rooted.

Whether or not the custom can be stopped, or seriously discouraged, by the legislation of our medical societies is subject to some debate.

That a remedy for the evil exists, there is no doubt, and we will further discuss this phase of the question in the next issue of the GAZETTE.

G. S. S.

SANITARY CONDITION OF HAVANA.

From a recent report made to the Adjutant General, Department of Cuba, Havana, on the vital statistics for the month of February, 1901, we notice that the death rate has been lower for that month than for any February of which there is any reliable record, the minimum being that of 1893, when there was 446 deaths, and the maximum that of 1898, when there was 1,602. This is not only less than any February since 1890, but actually less than any month of the preceding 12 years, the lowest in any month being 444 deaths, in November, 1900. The average for the 10 years succeeding 1890 was 746 deaths.

The rate per thousand—19.32—makes even a better showing: The last February of the Spanish rule, 1898, gave a death rate of 82.32 per thousand. February of 1901—the third February under American rule—gives a death rate of 19.32. This is a very creditable death rate, and places Havana in the class of healthy cities of the world. Many of the cities of the United States and Europe have a higher mortality rate than this. According to the latest figures from the Marine-Hospital reports, Baltimore, with a population of 508,957, for the week ending January 26th, had 225 deaths—a death rate of 22.99; Cincinnati—population 326,000—for the week ending January 25th, had 142 deaths—death rate open up the park a week earlier than usual in order to accommodate 22.65; Boston—population 560,892—for the week ending January 26th, had 260 deaths—death rate 24.10; Jacksonville—Population 33,000—for the week ending January 19th, had 16 deaths—death rate 25.21; Newark, New Jersey—population 246,070—for the week ending January 19th, had 107 deaths—death rate 22.61; New Orleans—population 287,000—for the week ending January 19th, had 156 deaths—death rate 28.26; New York—population 3,437,202—for the week ending January 26th, had 1,432 deaths—death rate 22.42; Washington—population 278,719—for the week end-

ing January 19th, had 141 deaths—death rate 26.60; Belfast, Ireland, for the week ending January 5th, had 165 deaths, with a death rate of 23.90; and Mobile—population 38,469—for the week ending January 16th, had 22 deaths—death rate 29.73. It will be seen that most of the cities have a much higher death rate than Havana.

THE AMERICAN MEDICAL ASSOCIATION.

The meeting of this Association will be held this year at St. Paul, Minn., June 4-7. In a recent issue of the Journal of the American Medical Association we noticed that arrangements have been completed for an excursion of the members of the American Medical Association to Yellowstone Park. The Committee of Arrangements has finally succeeded in persuading the officials to open up the Park a week earlier than usual to accommodate the Association. A special train will be run from St. Paul to the Yellowstone Park and the railroad officials have promised to do everything in their power to make it satisfactory to all concerned. The rates will be very low, but how low can not at this time be definitely stated. Those who attended the meeting in 1882 will remember with much pleasure a similar excursion that was run at that time, and these will not need to be informed that the one now proposed will be full of enjoyment. Further announcements will be made later. The Yellowstone National Park contains more natural wonders than are to be found anywhere else in the world, and this will be a rare opportunity for our Eastern friends to see what this portion of our Great West possesses.

OHIO STATE MEDICAL SOCIETY.

The fifty-sixth annual meeting of the Ohio State Medical Society will be held in Cincinnati on the 8th, 9th and 10th of May. The meetings and exhibits will be at the Scottish Rite Cathedral, Broadway, near Fourth street. The following is the program:

WEDNESDAY AFTERNOON.

Call to Order, 2 P. M.

InvocationRev. Hugo Eisenlohr

Address of Welcome

.....Hon. Julius Fleischmann, Mayor of Cincinnati

ResponsePresident Frank D. Bain, M. D.

Report of Committee of Arrangements.

Business which requires early attention.

Appointment of Committee on Nominations.

Glandular Fever.

J. Park West, M. D. Bellaire
Hypertrophy of the Prostate Gland.

H. J. Whitacre, M. D. Cincinnati
A Successful Case of Porro Caesarean Section for Placenta
Previa Centralis.

William J. Gillette, M. D. Toledo
The Pre-tubercular State.

W. S. Philips, M. D. Belle Center
Epigastric Pain.

Henry W. Bettman, M. D. Cincinnati
The Importance of the Early Recognition of Abdominal
Infections.

W. D. Hamilton, M. D. Columbus
A Limited Number of Observations on the Treatment of
Pneumonia with Serum.

Joseph Eichberg, M. D. Cincinnati
House to House Operating.

E. C. Brush, M. D. Zanesville
A Rapid Dilatation of the Eustachian Tube; With
Report of Cases.

C. P. Linhart, M. D. Columbus
The Alimentary Canal from a Therapeutical Standpoint.

Eli Conn, M. D. Akron
The Treatment of Traumatic Strictures of the Oesophagus.

Frank E. Bunts, M. D. Cleveland
WEDNESDAY EVENING.

Call to Order, 8 P. M.

Address in Medicine.

Frank Billings, M. D. Chicago, Illinois
THURSDAY MORNING.

Call to Order, 9 A. M.

The Cardio-vascular System in Interstitial Nephritis.

W. J. Conklin, M. D. Dayton
Albuminuria for Sixteen Years Without Perceptible
Impairment of Health.

P. Max. Foshay, M. D. Cleveland
The Morbid Anatomy of Epilepsy; Being a Summary of
the Results in One Hundred and Thirty Autopsies.

A. P. Ohlmacher, M. D. Gallipolis
Why is the Present Epidemic of Smallpox Likely to
Continue?

- W. C. Chapman, M. D.....Toledo
The Prevention of Typhoid Fever in Villages and
on Farms.
- C. O. Probst, M. D.....Columbus
Some Experience with Chloride of Gold and Sodium.
- John E. Sylvester, M. D.....Wellston
Ohio's Opportunity for Advancing Medical Science.
- W. J. Herdman, M. D.....Ann Arbor, Mich.
How the Medical Practice Act in Ohio Can Be Most
Efficiently Enforced.
- N. R. Coleman, M. D.....Columbus
Operation for Renal Calculus.
- Geo. W. Crile, M. D.....Cleveland
Ovarian Pregnancy: Is It an Explanation of Ovarian
Haematomata?
- N. Stone Scott, M. D.....Cleveland

THURSDAY AFTERNOON.

Call to Order, 1:30 P. M.

Executive Session.

Report of Treasurer and Librarian.

Report of Secretary.

Report of Standing Committees.

Executive.

Admission and Medical Societies.

Finance.

Publication.

Legislation.

Ethics.

Growth and Prosperity,

National Legislation.

Reports of Special Committees.

Election of Officers.

Selection of Place of Meeting.

Election of Delegates.

Annual Presidential Address.

- Frank D. Bain, M. D.....Kenton
The Prevention of Pelvic Disease Before and
During Puberty.

- Wm. H. Humiston, M. D.....Cleveland
The Prevention of Pelvic Disease After Marriage.

- Rufus B. Hall, M. D.....Cincinnati
The Prevention of Pelvic Disease During and After Labor.

J. F. Baldwin, M. D. Columbus
4 P. M., Address in Surgery.
A Surgical Operation.

John A. Wyeth, M. D. New York
THURSDAY EVENING.

Annual Banquet, Phoenix Club, 9th and Race Sts. 7:30 P. M.

FRIDAY MORNING.

Call to Order, 9 A. M.

To What Extent May We Hope by Treatment to
Delay the Progress of Cataract?

C. F. Clark, M. D. Columbus
Auto-toxemia, with Cases.

W. W. Pennell, M. D. Fredericktown
A Discussion of Cardiac Innervation; with Report of Cases.

C. F. Hoover, M. D. Cleveland
Hospitals in Small Cities.

Lester Keller, M. D. Ironton
A New Method For the Painless Removal of Hemorrhoids.

Thomas Charles Martin, M. D. Cleveland
The Care and Repair of the Perineum.

John M. Fassig, M. D. Zanesville
Arterio-sclerosis.

G. M. Waters, M. D. Columbus
Abnormal Conditions of the Foot as the Cause of Knee Pains.

A. H. Freiberg, M. D. Cincinnati
Herniotomy. Phelps Operation.

B. M. Ricketts, M. D. Cincinnati
Chronic Polio-myelitis in the Adult.

D. I. Wolfstein, M. D. Cincinnati
The Significance of Laceration of the Cervix Uteri.

Chauncey D. Palmer, M. D. Cincinnati
Cystic Tumors of the Pancreas.

Joseph Ransohoff, M. D. Cincinnati
If all papers on the program are not read before noon Friday,
there will be an afternoon session at 2 o'clock.

COMMITTEES.

Finance—H. J. Herrick, M. D. ('96), J. E. Cook, M. D. ('97),
H. A. Zimmerman, M. D. ('98), W. J. Conklin, M. D. ('99),
E. C. Brush, M. D. (1900).

Ethics—T. C. Hoover, M. D. ('96), Dan Millikin, M. D. ('97),
R. B. Hart, Jr., M. D. ('98), D. R. Silver, M. D. ('99), J.
H. Rodgers, M. D. (1900).

Publication—F. D. Bain, M. D. ('96), P. M. Foshay, M. D. ('97), J. M. French, M. D. ('98), J. P. Sawyer, M. D. ('99), Dan Millikin, M. D. ('1900), Frank D. Bain, M. D., John A. Thompson, M. D., ex-officio.

Legislation—Charles Graefe, M. D. ('96), J. A. Kimmel, M. D. ('97), D. N. Kinsman, M. D. ('98). N. P. Dandridge, M. D. ('99), T. M. Gehrett, M. D. (1900).

National Medical Legislation—L. B. Tuckerman, M. D.

Admission and Medical Societies—Oscar Hasencamp, M. D. ('96), J. E. Russel, M. D. ('97), Thomas Hubbard, M. D. ('98), Frank Winders, M. D. ('99), N. S. Scott, M. D. (1900).

Growth and Prosperity—Wm. H. Humiston, M. D., term expires 1903; C. L. Bonifield, M. D., term expires 1902; S. S. Halderman, M. D., term expires 1901; F. C. Clark, M. D. (1900), W. C. Chapman, M. D. ('99).

To secure the rate of one and one-third fare for the round trip, get a certificate from the ticket agent when the ticket is purchased for Cincinnati. This certificate, when endorsed by the Secretary of the Society and the Special Agent of the Central Traffic Association, entitles the holder to a return ticket for one-third the regular fare.

Tickets should not be purchased more than three days prior to the meeting, and are good for three days after the meeting.

Special Agent will be in attendance Thursday. Certificates must be signed on Thursday. Deliver certificates to Assistant Secretary when you register.

HOTEL DIRECTORY.

Burnet House.....	N. W. Cor. Third and Vine
Dennison Hotel.....	Fifth and Main
Emery Hotel.....	Vine and Arcade
Gibson House.....	Walnut near Fourth
Grand Hotel.....	Fourth and Central Avenue
Palace Hotel.....	Sixth and Vine
St. Nicholas Hotel.....	Fourth and Race
Officers' Headquarters, Gibson House.	

ANNUAL MEETING OF THE AMERICAN ACADEMY OF MEDICINE.

The 26th annual meeting of the American Academy of Medicine will be held at the Hotel Aberdeen, St. Paul, Minn., on

Saturday, June 1st, 1901, at 11 a. m. (Executive session; the open session beginning at 12:00M.), and continuing through Monday, June 3d.

The principal features of the meeting will be a symposium on "Institutionalism," and another on "Reciprocity in Medical Licensure." Series of valuable papers on both topics have been promised, as well as interesting papers on some other subjects. The President's address (Dr. S. D. Risley, of Philadelphia), will be delivered on Saturday evening, June 1st, and the Annual Social Session held on Monday evening, June 3d.

Members of the profession are always welcomed to the open sessions of the Academy. The Secretary (Dr. Charles McIntire, Easton, Pa.), will be pleased to send the program, when issued, blank applications for fellowship, etc., when requested to do so.

OHIO STATE PEDIATRIC SOCIETY.

The seventh annual meeting of this Society will be held in Cincinnati on 7-8 of May. The meetings will be in Convention Hall. Grand Hotel, and Grand Hotel will be Headquarters of Society.

The following is the program as completed:

The meeting will be called to order May 7, 2 p. m.

ORDER OF BUSINESS.

1. Reading minutes of previous meeting.
2. Report of council.
3. Election of members.
4. Appointment of committee on nominations.
5. Secretary and Treasurer's report.
6. New business.

PAPERS.

"Rheumatic Fever in Children,"

E. W. Mitchell, M. D., Cincinnati.

"Pemphigus Neonatorum," - A. Ravogli, M. D., Cincinnati.

"Infantile Nourishment," - Geo. M. Clouse, M. D., Columbus.

"Broncho-Pneumonia," - - R. S. Gangler, M. D., Dayton.

"Strumous Keratitis and Conjunctivitis,"

Derrick T. Vail, M. D., Cincinnati.

"Purulent Ophthalmia in the New Born,"

Edward Lauder, M. D., Cleveland.

"Phlyctenular Conjunctivitis," S. C. Ayers, M. D., Cincinnati.

At the conclusion of the afternoon session the local committee will give members a complimentary trolley ride to the Zoo, where refreshments will be served and President's address given. Returning to Convention Hall promptly at 8 p. m.

EVENING SESSION, 8 P. M.

- "Malignant Disease in Children with the Report of a Case,"
J. V. Kofron, M. D., Cleveland.
- "The Necessity of a More Perfect Aeration,"
H. H. Spires, M. D., Ravenna.
- "Dosimetric Medication in Pediatric Practice,"
M. Borts, M. D., Cleveland.
- "State Provision for Care and Treatment of Crippled Children,"
Frank H. Darby, M. D., Columbus.
- "Heredity or Environment," Chas. A. Hough, M. D., Lebanon, O.

MAY 8, 8:30 A. M.

ORDER OF BUSINESS.

1. Reports of committees.
2. Election of members.
3. Election of officers.
4. Unfinished business.
5. New business.
6. Seating of President.
7. Selecting time and place of meeting.
8. Unfinished business.

PAPERS.

- "Bloodless Reduction of Congenital Hip Dislocation,"
Walter G. Stern, M. D., Cleveland.
- "Chorea," - - James H. Taylor, M. D., Indianapolis, Ind.
- "Criminals and Defectives, How Best to Reduce their Numbers,"
J. H. McCassy, M. D., Dayton.
- "Chronic Intestinal Obstruction, with Report of a Case,"
D. S. Hanson, M. D., Cleveland.
- "Acute Intestinal Obstruction,"
F. F. Lawrence, M. D., Columbus.
- "Coal Tar Derivatives in Children's Diseases,"
J. B. McGee, M. D., Cleveland.
- "A Paper," - - G. W. Morehouse, M. D., Sparta.
- J. M. Dunham, M. D., President.....Columbus, O.
- J. W. Murphy, M. D., 1st Vice President.....Cincinnati, O.
- H. H. Jacobs, M. D., 2nd Vice President.....Akron, O.
- D. S. Hanson, Secretary and Treasurer.....Cleveland, O.

LOCAL COMMITTEE OF ARRANGEMENTS.

T. V. Fitzpatrick, M. D., Cincinnati, O.

E. W. Mitchell, M. D., Cincinnati, O.

Magnus A. Tate, M. D., Cincinnati, O.

Bertha L. Gleaser, M. D., Cincinnati, O.

Frank B. Cross, M. D., Cincinnati, O.

Estelle M. Riley, M. D., Cincinnati, O.

New Books.

ORAL SEPSIS. By William Hunter, M. D., F. R. C. P. Size, $6\frac{1}{2} \times 9\frac{1}{2}$, 34 pages, gold stamped, cloth binding. \$1.00 net. Cassell & Company, London, and 7 and 9 West 18th Street, New York.

This monograph is published in the hope that it may serve to draw additional attention to a source of disease extremely prevalent, and most egregiously overlooked. It is a forceful discussion, with illustrative cases, of the amount of poison absorbed into the system from diseased conditions of the mouth.

The author says: "The continuous influx of pus organisms from diseased teeth and gums must be a source of disturbance to the mucosa, causing catarrh and diminished gastric secretion. The sallow look and languid feelings of which he (the patient) complains and which he and his doctor agree in referring to his chronic indigestion, are really the expression of this septic absorption."

The course of treatment is clearly indicated, part of which belongs to the physician and part to the dentist.

NURSING ETHICS: FOR HOSPITAL AND PRIVATE USE. By Isabel Hampton Robb, Graduate of the New York Training School for Nurses attached to Bellvue Hospital; late Superintendent of Nurses and Principal of the Training School for Nurses, Johns Hopkins Hospital, Baltimore, Md.; late Superintendent of Nurses, Illinois Training School for Nurses, Chicago, Ill.; Member of the Board of Lady Managers, Lakeside Hospital, Cleveland, O.; Honorary Member of the Matron's Council, London, England. Cleveland: J. B. Savage, 90-92 Wood Street. 1901.

In this little volume the authoress has dealt with important details which are of interest to every nurse. We will not give in detail the many subjects discussed. It commences with a consideration of Nursing as a Profession, it considers also Qualifications. The Probationer. The Junior Nurse—Touch—Sympathy—Manner. Uniform. Night-duty—Night report. The Senior Nurse—

Special qualifications—Relation to probationers and juniors. The Head Nurse—Her relations to her pupils; patients; the physicians; the superintendent. The Graduate Nurse—Special qualifications and requirements—Personality. Remuneration. The Care of the Patient—Relation of the Graduate Nurse to the physician; to other nurses; to the public.

Every nurse should possess a volume and should study it as carefully as any of her specified text-books.

A POCKET MEDICAL DICTIONARY, giving the pronunciation and definition of the principal words used in Medicine and the Collateral Sciences, by George M. Gould, A. M., M. D. Fourth Edition Revised and Enlarged. 30,000 words. P. Blakiston's Sons & Co., Philadelphia. 1900.

This edition came to our review some time since. The book is thoroughly fitted to pocket wear by a leather cover and to mental use by 30,000 words and terms concisely and clearly defined. It contains a valuable addition to its tables in those of Poisons, and Tests. Dosages of all standard drugs are given in both systems, and its table of Eponymic Clinical Terms is of great value. Withal it is a complete and handy guide.

TUCKERMAN.

THE AMERICAN YEAR-BOOK OF MEDICINE AND SURGERY being a Yearly Digest of Scientific Progress and Authoritative Opinion in all branches of Medicine and Surgery, drawn from Journals, Monographs, and Text Books of the leading American and Foreign Authors and Investigators. Collected and arranged with critical editorial comments by Samuel W. Abbott, M. D., Archibald Church, M. D., Louis A. Duhring, M. D., D. L. Edsall, M. D., Alfred Hand, Jr., M. D., Milton B. Hartzell, M. D., Reid Hunt, M. D., Wyatt Johnston, M. D., Walter Jones, M. D., A. O. J. Kelly, M. D., David Riesman, M. D., Louis Starr, M. D., Alfred Stengel, M. D., A. A. Stevens, M. D., G. N. Stewart, M. D., Reynold W. Wilcox, M. D., Medicine. And J. M. Baldy, M. D., Charles H. Burnett, M. D., J. Chalmers Da Costa, M. D., W. W. Newman Dorland, M. D., Virgil P. Gibney, M. D., C. A. Hamann, M. D., Howard F. Hansell, M. D., Barton Cooke Hurst, M. D., E. Fletcher Ingals, M. D., W. W. Keene, M. D., Henry G. Ohls, M. D., Wendell Reber, M. D., J. Hilton Waterman, M. D., Surgery. Under the general editorial charge of George M. Gould, M. D. Philadelphia and London. W. B. Saunders & Company. 1901.

The work appears in two substantially bound volumes, one being devoted to *Medicine* and the other to *Surgery*. It is, as the name suggests, a review of the best that has appeared in print during the past year, and all authorities are quoted.

All that is new and instructive is to be found in the work, representing as it does, the best efforts of numerous medical journals and text-books. As a book of reference, for the latest advances in Medicine and Surgery, it is invaluable.

THE TREATMENT OF FRACTURES. By Charles Locke Scudder, M. D. Surgeon to the Massachusetts General Hospital, Out-Patient Department; Assistant in Clinical and Operative Surgery in the Harvard University Medical School. Assisted by Frederic J. Cotton, M. D. Second Edition. Revised. With 611 Illustrations. Philadelphia and London. W. B. Saunders & Company. 1901.

This book is intended to serve as a guide to the practitioner and student in the treatment of fractures of bones, being a practical statement of the generally recognized methods of dealing with fractures. The attention of the student is diverted from theories to the actual conditions that exist in fractured bones and he is encouraged to determine for himself how to meet the conditions found in each individual case. Methods of treatment are described in minute detail, and the reader is not only told, but is *shown*, how to apply apparatus, for, as far as possible, all the details are illustrated. This elaborate and complete series of illustrations constitutes a feature of the book. There are 611 of them, all from new and original drawings and reproduced in the highest style of art.

A TEXT-BOOK OF OPHTHALMOLOGY. By John W. Wright, A. M., M. D. Professor of Ophthalmology and Clinical Ophthalmology in the Ohio Medical University; Ophthalmologist to the Protestant Hospital, Columbus, Ohio; Member Ohio State Medical Society; Member American Medical Association. Second edition. Thoroughly revised. With 117 Illustrations. \$3.00. Philadelphia. P. Blakiston's Sons Company, 1012 Walnut Street. 1900.

This work has occupied more than the usual time for a review because of the fact that there are some recommendations, especially as to treatment, which are at variance with the general acceptance of modern ocular therapeutics, and for this reason we have hesitated to express a hasty opinion. For instance, with regard to the treatment of corneal ulcers we find the following: "Carbolic acid is the remedy *par excellence* for corneal ulcers; it is applied directly to the ulcer in the pure form by means of a small cotton-holder, care being taken not to touch the surrounding parts. The application of the acid is to be preceded and followed by several in-

stillations of cocaine solution into the eye to relieve any pain. Applications of the acid should be made in this manner once a day until the edges of the ulcer are clear."

To recommend to the general practitioner, for whom the work is intended, that applications of carbolic acid be made once a day to the cornea, we believe to be dangerous, even in skilled hands it has to be used with the greatest discretion. Then, too, cocaine is used in collyria, in from four to eight grains to the ounce, for conjunctivitis and corneal diseases. Many, and we believe the majority, regard cocaine as contra-indicated in any corneal inflammation, and that it should not be prescribed beyond the acute stage of any form of conjunctivitis.

Even as an elementary work, to be abreast with the times, more could have been said as to the use and value of the radiograph and the electro-magnet in assisting to locate and remove foreign bodies in the eye.

The work could be improved for reference by having a more complete index. The publishers' art in the printing and binding is all that could be desired.

HYPNOTISM. A complete system of method, application and use, prepared for the self-instruction of the Medical Profession. By L. W. De Laurence, Instructor at the School of Hypnotism and Suggestive Therapeutics, Pittsburg. Illustrated. \$1.50. Chicago. The Henneberry Co., Publishers.

The subject of Suggestive Therapeutics is an interesting one. That there is a field for its use in a legitimate way is acknowledged, but, until recent years, it has received very little recognition from physicians. As stated on the title page, this is "A Complete System of Method, Application and Use, Prepared for the Self-instruction of the Medical Profession."

THE MEDICAL NEWS POCKET FORMULARY FOR 1901. By E. Quin Thornton, M. D., Demonstrator of Therapeutics, Pharmacy and Materia Medica in the Jefferson Medical College, Philadelphia. Third Edition. Revised and enlarged. Lea Brothers & Company, Philadelphia and New York. 1901.

Occasionally a physician is puzzled as to how best to combine the remedies he wishes to give, or, it may be, that an appropriate remedy has been overlooked. This little volume is intended to assist the physician and not to replace individual thought. Critical study has been given to each formula in all of

its parts. Diseases are arranged alphabetically, and under each are given efficacious prescriptions for simple cases as well as for the various stages of complications. Attention has been paid to palatability and pharmaceutical elegance, yet without sacrifice of therapeutical efficacy.

MEMORANDA ON POISONS. By Thomas Hawkes Tanner, M. D., F. L. S. Eighth revised edition. By Henry Leffman, A. M., M. D., Professor of Chemistry in the Woman's Medical College of Pennsylvania, Professor of Chemistry in the Wagner Free Institute of Science; Pathological Chemist Jefferson Medical College Hospital; Member Society Public Analysts, etc. Price 75 cents. Philadelphia. P. Blakiston's Sons & Company, 1012 Walnut Street. 1901.

This is a decidedly and deservedly popular little manual. The necessity of producing a new (the eighth) edition has offered an opportunity for revision. The principal changes have been the substitution of modern chemical nomenclature and the omission of obsolete portions of the old text. It is unnecessary to commend so popular a book.

THREE THOUSAND FIVE HUNDRED QUESTIONS ON MEDICAL SUBJECTS ARRANGED FOR SELF-EXAMINATION. WITH THE PROPER REFERENCES TO STANDARD WORKS IN WHICH THE PROPER REPLIES WILL BE FOUND. Third edition. Enlarged. With questions of the State Examining Boards of New York, Pennsylvania and Illinois. Price 10 cents. Philadelphia. P. Blakiston's Sons & Co., 1012 Walnut Street. 1901.

This appears to us to be a rather useful little book which an undergraduate or physician might use occasionally. As a rule the questions have been selected with regard to their bearing upon practical medicine.

REPRINTS RECEIVED.

A Plea for Better Obstetrical Work. By Lillian G. Towslee, M. D., Cleveland. (Reprint from the *Bulletin* of the Cleveland General Hospital.)

Sterility. By Lillian G. Towslee, M. D., Cleveland. (Reprint from the *CLEVELAND MEDICAL GAZETTE*, Jan., 1901.)

Medical Legislation: Its Relation to the Laity and the Medical Profession. By R. Harvey Reed, M. D., Rock Springs, Wyo. (Reprinted from *Western Medical Review*, Lincoln, Neb., April, 1900.)

The State Laws of Wyoming in Reference to Contagious Diseases. By R. Harvey Reed, M. D., Rock Springs, Wyo. (Reprinted from *Western Medical Review*, Lincoln, Neb., Nov., 1900.)

Traumatisms Inflicted by Animals. By R. Harvey Reed, M. D., Rock Springs, Wyo. (Reprinted from *Annals of Surgery*, Philadelphia, Pa., April, 1900.)

The Practice of Medicine and Surgery In the Higher Altitudes. By Harvey Reed, M. D., Rock Springs, Wyo. (Reprinted from the *Denver Medical Times*.)

Society Proceedings.

May L. Bassett, Medical Reporter.

CUYAHOGA COUNTY MEDICAL SOCIETY. REGULAR MEETING, MARCH 7, 1901.

The regular meeting of the Cuyahoga County Medical Society was held on Thursday evening, March 7th, at the Library Building. The meeting opened with the President in the chair. The minutes of the last meeting were approved.

A letter of thanks was read from the Cleveland Medical Library Association for the donation of \$100.00 made by the Society to the New-Book Fund, and also a letter from Mr. W. W. Nevison.

The regular program followed.

Bacteriology and Pathology of Diphtheria. . . . Dr. R. G. Perkins
 Differential Diagnosis of Diphtheria. Dr. E. P. Carter
 Antitoxin in Diphtheria. Dr. P. H. Sawyer
 Intubation and Tracheotomy in Diphtheria. . . . Dr. J. V. Kofron

DISCUSSION.

Dr. Yarian: If I recall correctly there was one point omitted in the diagnosis which I think should be added and that is the odor of the disease. In all cases in which I have been able to demonstrate the presence of diphtheria there has been noticed a stench peculiar to diphtheria which is unmistakable. However, there have been a few cases in which it was not present, but these cases were ones in which I was not positive that diphtheria was present. I have one case now in which the child has a sore throat, a temperature of 102 degrees, pulse 120, and considerable enlargement of the glands of the throat on one side. On examination of the throat I found membrane upon the left tonsil, the

membrane being entirely confined to the left tonsil, and in this case there is no odor. The child did not seem to be very ill, so after consulting the parents' wishes in the matter, I decided to wait a little and watch the case. In the evening of the same day, I found the temperature still at 102 degrees but the pulse was a trifle slower, the membrane not extending at all, no odor upon the breath, but still I felt that perhaps it would be safer to administer antitoxin, so used 2000 units. This morning I saw the case and the membrane was curling and disappearing, the temperature normal, rather a fast pulse yet, but still the child was better. From my experience with the antitoxin it seems to me that I must have been dealing with a case of diphtheria and yet in this case I did not note the odor that I considered so helpful in differential diagnosis.

Dr. Kofron: One point in the diagnosis of diphtheria which is important is this: that the first or primary bacteriological examination does not always show the Klebs Loeffler bacillus. During one year I had all my suspected cases examined bacteriologically, but the results were so unsatisfactory that I decided to abandon the practice. I have since seen a statement by Dr. Holt to the effect that fully 95 per cent of the cases in which one would unhesitatingly make a diagnosis of diphtheria by clinical symptoms, the Loeffler bacillus is found, provided proper precautions are observed. My experience during the year I had bacteriological examinations made was that in three cases I now recall the Loeffler bacillus was not found until the second examination was made, that is, from a second swabbing of the throat. So I feel that if 95 per cent of the cases are really diphtheria, it would be unnecessary for the ordinary general practitioner to look for the other 5 per cent that are not.

Dr. Perkins: It seems to me that Dr. Kofron's method would bring about a double injustice, for if no bacteriological examinations were made, all cases of sore throat must be isolated for three weeks, or else cases capable of transmitting diphtheria in a severe form would be left free to scatter the infection broadcast.

Dr. Hanson: Having had the fortune to see a good many of these cases I am convinced that the diagnosis can be made clinically. The exudation of scarlet fever is not at all like that of diphtheria, not so compact or so heavy, nor so even, while that of diphtheria is a distinctly continuous patch, very dense and packed down closely upon the tonsil. The diagnosis of follicular tonsillitis may look somewhat like diphtheria, and yet as a rule I

think you can easily make a diagnosis. In the case of diphtheria the membrane is usually continuous and usually begins on one side upon one tonsil and extends to the other side, while in follicular tonsilitis and in scarlet fever the exudation usually begins upon both tonsils at once. In follicular tonsillitis exudate is in follicles of tonsil and never a continuous membrane at first. Then again as to the rash in diphtheria, I have never seen any rash in scarlet fever that looked at all like the rash of diphtheria. Indeed, I think that diphtheria is usually free from any rash.

As regards intubation, I think as much of it as the reader of the paper. And it is wonderful what the larynx will endure and yet perfectly recover. In two cases which I had this fall this was particularly demonstrated. In one case it was necessary to leave the tube in 34 days and in the other 45 days. In the first case it was necessary to reinsert the tubes three or four times, and in the latter case the tube was reinserted several times before final removal. Both children recovered, which would not have been possible if it had not been for the aid of intubation. Speaking of tracheotomy, I think I saw a statement in the Medical Record (quoting some foreign authority) to the effect that children who had been tracheotomized rarely lived beyond 20 years of age.

Dr. Cogan: In regard to this treatment of all patients with sore throat, I always use hydrogen peroxide or listerine until I can determine whether the membrane is going to spread or not, and then if it does spread I administer antitoxin. It seems to me that the chief value comes in giving antitoxin early before there is degeneration of the heart or kidneys.

Dr. Aldrich: I would like to ask if any gentlemen have found albumose appearing in the urine after the administration of antitoxin. If I may be pardoned a word there is one point in scarlet fever which I wish to mention and that is that an aid to diagnosis, beside the general condition of the throat, etc.,—an inflamed area over the soft palate and uvula in the shape of a rainbow. I would like to ask also whether anyone has noted a condition resembling peliosis rheumatica or small hemorrhages about the joints following the administration of antitoxin.

Dr. P. H. Sawyer: In regard to the antitoxin and intubation I would say that I have had several cases of laryngeal diphtheria in which intubation was used but in none of them was it successful, and those cases in which it did succeed were those which were in the hands of others and antitoxin was used. Three of these cases were mine and one of them had become cyanotic when the

antitoxin was used. One was that of an Italian child, who had a weak, soft, rapid pulse showing evidences of general poisoning, and I gave antitoxin and intubated. The tube remained for 72 hours and when it was removed the voice was still absent and the breathing was labored, but I did not think best to replace the tube. It was two weeks or more before the child recovered its voice. Another case was that of a boy who was severely ill with diphtheria. I called Dr. Kelley in consultation and the child was given antitoxin and intubated, and it recovered. In another case I gave 3000 units of antitoxin. Dr. Kelley also intubated this case, and said he did not think the child could live but a short time, but it recovered. I recall a number of cases of laryngeal diphtheria in which intubation alone was used with favorable results. I am confident that if antitoxin had been administered in connection with intubation these cases would have recovered. In the case of an Italian child two years old who was very ill with laryngeal diphtheria, the stenosis great and respiration very labored, antitoxin was given, but no other treatment as I felt that, owing to his environment, it would be useless to do anything more for him. The child recovered. The other cases I have mentioned have been where an epidemic was prevailing and though no bacteriological examinations were made I felt reasonably sure of my diagnosis. I have had a long experience with diphtheria and feel quite sure of my diagnosis though I cannot describe appearances and symptoms as well as I can see them. I believe that antitoxin is the very best remedy yet discovered, but in some of the cases mentioned it would have failed entirely if it had not been for intubation.

Dr. Aldrich: I want to ask Dr. Sawyer if he has ever met cases of croup in which he found no membrane in the nose and throat yet administered antitoxin.

Dr. P. H. Sawyer: I have seen such cases but not since I used antitoxin. I should certainly use it if there was much difficulty of breathing without waiting for a bacteriological examination.

Dr. Tuckerman: I was much interested in the statement made by Dr. Hanson, that patients who had had tracheotomy performed did not live beyond the age of 20, because there comes to visit us nearly every year a woman of 50 who was tracheotomized 45 years ago. It is somewhat difficult to decide whether to intubate or tracheotomize in a given case, and it is rendered still more difficult since the use of antitoxin, as the proportion of recoveries

after tracheotomy has been materially increased till now, I believe, the balance is somewhat in favor of tracheotomy. I was not particularly enthusiastic about antitoxin when it first came. Like all practitioners who have seen a good deal of diphtheria in private practice and at such times of epidemics, I had become able to get a pretty good idea from the clinical course of the case whether it would die or not, and the first two or three cases in which I used it, were cases in which from previous experience I had learned to regard death as certain, and when in these cases I saw the membrane begin to curl up and drop off, which from past experience I had every reason to expect to grow, I made up my mind that there was an efficacy in antitoxin and that it was negligent not to use it, but I do not believe in waiting for bacteriological examinations. I order all cases of sore throat of whatever character to be isolated. I use the treatment also which has been outlined. I use binoide of mercury ($\frac{1}{2}$ grain to iv water, a teaspoonful every hour), and I inject antitoxin if I find the membrane increasing. Fortunately there is a means of diagnosis between those forms of croup that are membranous and those that are spasmodic. By using 1-1000 of a grain of trinitrin and 1-500 of apomorphia every five or ten minutes you can quiet almost any case of spasmodic croup at the end of an hour or an hour and a half. If it is not quieted at the end of that time, you have pretty positive evidence that it is diphtheritic in character, but it must also be remembered that there are cases of croup which are membranous but not diphtheritic, although this was denied in Germany for a long time by leading authorities. I have one case which is still living where tracheotomy was done twice. In the first attack I was unable to get a bacteriological examination, but in the second attack a bacteriological examination revealed the presence of an almost pure culture of pneumococcus and no Klebs Loeffler bacillus. In a case of croup I give apomorphia and trinitrine and if relief does not come immediately I administer antitoxin without waiting for a bacteriological examination, and when this is used in proper season it is rarely necessary to resort to intubation. I believe that when indications are so severe that it appears likely to be necessary to keep the intubation tube in for two or three weeks, it is far safer to resort to tracheotomy.

Dr. Aldrich: What effect do trinitrine and apomorphia have in cases of catarrhal croup?

Dr. Tuckerman: In cases of catarrhal croup there is thickening of the mucous membrane, but there is also a spasmodic ele-

ment. This latter element is controlled by the trinitrine and apomorphine, and it will be often found that the tumefaction of the membrane is not sufficient to occasion dangerous stenosis. If, after the use of the remedy the stenosis remains severe the probability is that you have to deal with either an edema or a pseudo-membrane.

Dr. Aldrich: In a number of cases in which I had to make a differential diagnosis between spasmodic and diphtheritic croup I have used trinitrine, but I have never used apomorphia. I have had two cases of laryngeal diphtheria, in which I found diphtheritic membrane in the nose and none in the throat. I think the nose should always be examined. None of the essayists have called attention to a point which has aided me in making a diagnosis when no membrane was visible in the throat or nose—that of membrane upon the edge of the epiglottis. If you can get someone to hold the child firmly it is possible to see the epiglottis in nine-tenths of the cases by pressing the tongue down with some firmness and force.

Dr. Lauder: If there is any particular organ of the body more likely than another to be affected during diseases in other parts possibly it is the eye. Following diphtheria the most common result is paralysis, often incomplete, of both the ciliary muscles. The symptoms generally appear from four to six weeks after the commencement of the illness. In most of the cases the attack of diphtheria has been mild, often being described as “ulcerated throat;” but with this there is generally a history of depression and weakness in the patient out of proportion to his throat symptoms. Paralysis of the external recti muscles occurs occasionally. Both forms of paralysis recover in the course of a few weeks under tonic treatment.

Dr. Moorehouse: The question of bacteriological examinations in cases of suspected diphtheria is always an interesting one. Not infrequently, as it seems to me, it is of more practical value to the physician in aiding him to determine when the individual may safely go into society again than it is in the matter of wise and efficient treatment. All of my own very limited experience with diphtheria has been acquired in hospitals where every facility was at hand for the confirmation of the clinical diagnosis by bacteriological examinations, but my tendency has been more and more to administer the antitoxine as soon as a case which was clinically diphtheria entered the hospital, without more than a preliminary examination of a cover-slip preparation of the suspected throat.

This attitude has been taken in deference to the opinion of those having the largest experience with the disease, and is based upon two facts, first, that antitoxine may be practically without danger, except possibly of a fugitive skin eruption, and, secondly, that the earlier it is given the more effective it is. For a case which is pretty positively diphtheria it is not advisable to wait the 18 to 24 hours necessary to make a bacteriological examination and the unwisdom of such a course is greater in proportion to the degree of toxæmia at entrance. It may be difficult to determine what "early" administration of antitoxine is, but it is certainly better to give it when it will be most effective, even though you run the risk of its occasional administration in cases not diphtheria. Bacteriological examinations may be used later to determine whether it is best to give other doses of antitoxine, and when it is safe to raise the quarantine.

Dr. Sawyer spoke of the use of antitoxine as a prophylactic measure, and of the impossibility of determining its real value in the individuals to whom he had administered it for that purpose, on account of the impossibility of determining how many would have developed the disease in the absence of such protection. Many of the children's hospitals of the country have had an interesting experience in this matter. Before the introduction of antitoxine as a prophylactic the Children's Hospital in Boston was obliged frequently to quarantine its wards on account of the accidental admission of a child with diphtheria, or, more commonly, of its development in the wards in a little patient admitted for some other condition. Since the beginning of their prophylactic use of the serum they have not been troubled in this way, and the hospital has never, if I am correctly informed, been quarantined on account of an epidemic of diphtheria.

Dr. H. B. Herrick: I think the day has not come yet when any physician will depend upon antitoxin alone for the treatment of diphtheria. I have used it in three cases unsatisfactorily and I have had a good deal of diphtheria this fall—twenty-four cases which I called diphtheria and six other cases which were left twenty-four hours before a decision was made and which I did not call diphtheria. In three of the cases I did give antitoxine and of these cases two died. These two are the only ones that died. There is a difference in children and in the effect of treatment and no physician can say what will answer in each case. The first case in which I gave antitoxin was that of a child six years and cultures were made from the secretions of the throat and as it proved

to be diphtheria, antitoxin was administered at once. The first dose was given at noon and between four and six o'clock the child became very nervous and restless, so that it was impossible to keep her in bed. It passed off about six o'clock and the next day another dose of antitoxin was given at noon. About 4 o'clock she went into convulsions and during the next few hours I had the worst case of diphtheria I ever saw. However she was able during the twenty-four hours to take eight eggs—the throat was well opened and they were allowed to slip down—and by using this amount of nourishment she lived through the attack and recovered. I think there is always something that can be done to relieve a child, some remedy that in each individual case will change the conditions and relieve. But I hope antitoxin will fulfill all that is hoped for it and enable the physician to successfully treat diphtheria.

Dr. Jones: My experience is that those patients who could take plenty of nourishment have lived, and those who could not, have died. I think as a general thing that antitoxin is believed to be the best thing known for diphtheria. I recall some cases in which antitoxin was administered where the patient did not take nourishment well which recovered when we did not expect it. I recall a case of a small boy who had a severe infection. One child in the family had died of the disease a short time before. The physician who had been treating the case told the family that he had been giving antitoxin, but this could not have been true for the mother told me that the preparation used was a white powder. I advised antitoxin in this second case, administered it and next day found the child better, the edges of the membrane rolling, and I am pretty confident that if I had not given antitoxin the boy would have gone as his brother did. I believe in these very bad cases that if antitoxin had not been given they would not have recovered. Indeed, I do not fear a case of diphtheria as I used to. Something has been said here about the point where diphtheria might originate, and I would say that I recall one case in a family on Stafford street in which it appeared that the child had received a frostbite from lack of proper clothing, and that a small blister resulted into which diphtheritic membrane was accidentally introduced and the boy died from the infection.

Dr. Spenser: I would like to ask a question of Dr. Hart. He has spoken of 40 grain doses of chloral hydrate, as having been used in his cases of diphtheria. Since it is true that chloral hydrate relaxes the arterial system and gives the heart more work to do,

I would like to ask the Doctor if he has ever had any sudden deaths following its use. Another thing that I might mention is that years ago when physicians used various strong local antiseptics, one of them was composed of chlorin water and tannic acid, when these were mixed they had a solution of dilute hydrochloric acid and tannic acid, the antiseptic action of the chlorin having been obliterated so that they failed to get the result desired because they did not understand the combination resulting. Chlorate of potassium and glycerine with tincture of iron was used internally with no benefit, because the supposed systemic antiseptics was wanting.

Dr. P. H. Sawyer: I was called upon to treat of the use of antitoxin only, in my paper of this evening, so I have not endeavored to outline the general treatment of diphtheria, yet in most cases I do not believe that our duties end with the administrations of antitoxin. There are often great difficulties in carrying out the indications. One little girl of whom I have spoken, manifested in a marked degree the anorexia mentioned by Dr. Jones. The case was exceedingly difficult to manage, and yet there were several things that could be done. I found that by keeping the room filled with lime steam that she could breathe very much easier. The administration of heart stimulants was indicated but they were given with much difficulty, indeed on account of her struggles it was almost impossible to administer them. By keeping her on her back the danger of heart failure was in some degree obviated. Antitoxin is without doubt the best remedy, though I do not believe it excludes proper management of the case, or other treatment.

Dr. Quirk: I would like to ask Dr. Perkins if it is not a fact that many cases having mixed infection, a streptococcus infection as well as the true bacillus, are benefitted by the local application of some good antiseptic at the same time that we are using the antitoxin. And it is along this same line I believe that Doctor Luker spoke of the odor. I think that it is in the mixed infections that we get an odor, and it is in these cases that we can use other remedies with the antitoxin with benefit, as H_2O_2 , which, I believe, is the most destructive to the streptococci.

Dr. Perkins: The injection of diphtheria antitoxin has no effect whatever on the streptococcus growth. After the diphtheria had cleared up, the streptococcus might set up or continue inflammation, though I do not remember seeing any such case.

Dr. Hart: So little has been said about the medical treatment of diphtheria that I would like to say something along that line. I shall refer particularly to some experiences dating back twenty years, at a time when the disease was epidemic on the south side of the city, and many cases took on a malignant character. At that time the opinion now held that it originates in a bacillus was unknown, and there was no antitoxin.

Dr. C. B. Galetin was then my near neighbor; our business covered much of the same territory and we often compared notes. About this time he began the use of chloral hydrate in the treatment of diphtheria, and was, I believe, the first to so employ it. In 1884 he published a small volume on this treatment, which can be found in the library, and will repay a perusal. His mistake was in claiming the remedy as a specific. Yet I believe it is an invaluable contribution to the treatment. I early began its use and found it of very great value. I recall the case of a little girl of five years who was brought to my office with the hoarse cough of laryngitis. I found the diphtheria membrane loose and dropping off the throat. I hurried the child home and began the use of chloral hydrate. The symptoms were very severe, and many times it seemed as if the child would expire from suffocation. In a few hours she was taking the medicine at the rate of 45 grains in 24 hours, and continued to do so six or seven days before the symptoms subsided. According to the mother's statement the child slept 18 or 20 hours a day. I repeatedly urged upon her the danger of such large doses and directed smaller ones, but at the next visit she would say that as soon as the effects of the medicine began to go off the child nearly expired from suffocation, and that she was compelled to resume the full dose. The case made a perfect recovery.

I had a number of similar cases which terminated favorably, though not without failures. The dose given in the case referred to was heroic, and not all will bear so free use of the chloral hydrate. But children of three years can usually take 15 to 20 grains, and often more, in 24 hours. I regard it as the best intestinal antiseptic I know, and its usefulness is not confined to diphtheria.

At the time of this epidemic there were many cases of follicular pharyngitis. There is a point in the differential diagnosis between the two diseases which is of great importance, and which was very marked at that time.

The introduction of antitoxin has almost revolutionized the treatment of diphtheria, and it is hoped that its use has introduced a new era. I use it in common with others. Yet to one who saw

diphtheria reappearing under a new name in 1849, and spreading rapidly far and wide, after having been lost sight of for a generation, and who in fifty years of experience in its treatment has seen many vaunted remedies discredited and dropped, there is a strong tendency to some reservation in the acceptance of new theories and new remedies. The difference in epidemics and in constitutional tendencies is often very great, and are to be most carefully considered before we can fully define the value of antitoxin, and its place in the treatment of diphtheria.

If the case is seen in the early stage there will often be noted small points of exudation on the tonsils. If these do not extend and coalesce in 24 hours, and are still confined to the tonsils, then the case rarely proves to be diphtheria, and the complications of that disease do not follow.

In reply to Dr. Spenser's question I would say: It is not pleasant and will not unlikely seem presumptuous, to express opinions quite opposed to the teaching of the authorities, and probably of the medical schools here; but if I am to answer the doctor, I must do it frankly and in accordance with my convictions.

At the time I have referred to, I early raised the question with Dr. Galentin as to whether chloral hydrate, in the large doses given, might not seriously depress the action of the heart. Dr. Galentin and myself observed very carefully the effect of the drug on our patients along that line, and frequently compared notes as to our conclusions. We saw then, as we had seen before, and as we do now, fatal results from the toxin of diphtheria. But we were unable to refer these fatal cases to the effect of the medicine, but on the contrary deemed them less frequent under its administration.

Our conclusion was that chloral hydrate, as we gave it to children and our young patients, did not act as a cardiac depressant, and that it was the most effective remedy we possessed.

Correspondence.

CONSTANTINOPLE, March 12th, 1901.

Editors Cleveland Medical Gazette:

Gentlemen:—I have forgotten what I have previously written to you and what point in my pilgrimage I had reached at my last account. Not that I shall attempt a connected or complete report of my wanderings, for in a trip of this kind the sudden changes of scene and incident are kinetoscopic in their number and rapidity.

The mind receives thousands of impressions that the constant use of the telegraph in shorthand could not communicate. One could devote a long chapter to the great rock of Gibraltar which, with its stone walls and fortifications, its rock-hewn galleries, its Moors and Spaniards among which and whom Tommy Atkins with his red coat and pill-box cap bobs up at every turn—makes a picture never to be forgotten. Across the neutral ground and on Spanish soil one is at once met with evidences of shiftlessness—poor roads, dilapidated buildings, dirty streets. It is not surprising to learn that smallpox was prevailing at Linea.

The Mediterranean was smooth as a mill-pond when we sailed away from the lofty, snow-crowned mountains of Grenada and crossed the sea to Algiers. What we had hitherto seen of Africa was dark, rocky and forbidding. But Algiers is beautiful in situation in a grand natural amphitheatre rising from the edge of the bay up the hillsides, and has a fine harbor. France is justified in her pride in Algiers. The variety of peoples here is most interesting. Among the 91,000 inhabitants of Algiers one sees, besides the governing French, and many English and other European visitors, Arabs and Moors, Berbers, Nubians and Kabyles, each with their own peculiar dress, language and customs. I visited the British Cottage Hospital at Algiers. It is away out and up the hillside above the business portion of the city, near the Colonna Voirol, and commands a fine prospect. It was formerly a villa, the residence of the late Dr. Richard Gardner, an English physician, who lived twenty years in Algiers and, dying, willed this house and grounds for hospital purposes. It is only a small place with six beds, a matron and four nurses. It is intended for British and American patients, and also for strangers, and has been in operation four years. There is also a house isolated in the same grounds, with a nurse, for contagious cases. The charge for foreign private patients is 15 francs (\$3.00) per day, with extra charge for laundry, wine and spirits, surgical appliances, doctors' and chemists' bills, and 3 to 6 francs for nurses. For infectious cases a foreigner would be charged 25 francs a day besides the extras. The matron and nurses are English. The place is neat and orderly as one could wish. If so unfortunate as to be taken sick in Algiers I would greatly prefer to take my chances at the British Cottage Hospital rather than at the Hôpital Civil de Mustapha, the large municipal institution which I afterward visited. Being misdirected, I approached the enclosure of the Hôpital Civil from the rear and had to walk around a half mile of

plastered stone wall ten feet high to reach the gate. The wall encloses about five acres of ground, just sloping enough for drainage, upon which stand some twenty-four large and a number of small buildings, with gardens, drives, walks and palm and eucalyptus and other shade trees between. The buildings are of stone or stucco and all but one or two are only one story in height and quite old. The porter's house, the pharmacy and doctors' quarters and other administration buildings are particularly low and shabby. The whole hospital contains about one thousand beds, with at present about 800 patients. Usually each building is a ward, or sometimes two wards with accessories; and as the French fashion is, each ward named after an illustrious Frenchman. For instance, going along the driveway one reads over various entrances, "Salle Claude Bernard," "Salle Boullaud," "Salle Andral," "Salle Bichat," "Salle Dubois," "Salle Lisfranc"; and similarly the names of Ricord for one of the venereal and Dupuyren for one of the surgical wards are commemorated. In my rounds, as I entered the Salle Guersant, rightly surmising I would find the children there, I met the most evidences of intelligence I had seen anywhere in the hospital. The patients as well as the attendants had appeared a very ignorant and stupid lot of people, but the children were at once on the *qui vive*, and I heard many guesses as to whether I was "Anglais" or "Americani" and what I wanted; and when I prepared my camera some of them understood the game at once and struck attitudes or made grimaces and were eager or afraid to be photographed. The boys' and girls' wards had each fifty beds. As I have said, the attendants (mostly French) in the wards appeared very ignorant and dull, like the stupidest kind of servants. There were no nurses (properly speaking) in sight. The wards and operating rooms were very untidy and cold. The nursing, if such it can be called, seemed to be under the supervision of twenty or more Catholic Sisters, Franciscans, if I remember rightly, whose duties were probably principally religious. There is no training school in connection. The Sisters were as simple, child-like and curious as possible at sight of strangers. They flocked around examining our clothing and my kodak, laughing and chattering among themselves exactly like so many seven-year-old American children might do to a good-natured foreigner.

One of the buildings at the Hopital Civil is a fine, large three-story structure of stone. It is not yet quite completed, but that part of it which is ready is in use. It is to be devoted en-

tirely to electricity. They had a fine (static) X-ray apparatus and a collection of good skiagraphs. There is a photographic outfit in connection. I readily obtained permission to use the dark room for changing my plates—of course for the inevitable *pour boire* to the attendant. They are going to have electrical baths here, too, as well as the more usual means of using electricity therapeutically. There are thirty doctors on the staff of the Hopital Civil de Mustapha, some of whom are also professors in the Lycee de Mustapha, (the first word of the name I cannot at this moment recall) the Medical School of Algiers. Twenty medical students are appointed internes, but only three are on duty at a time, two in day time and one at night, in all this great place, with its numerous patients. In the doctors' quarters the internes were just having their noonday meal, which seemed to consist mainly of a bottle of wine and a loaf of bread. These two articles appeared to be the staples for the patients also.

Algiers, I think, would be a most interesting place to make studies in somatology and languages. The student of archaeology would also find material in the museum of Algerian antiquities as well as elsewhere in the city. The city is too much Gallicized to be purely Oriental, but presents a variegated combination of many types of races, tribes, dresses and languages. The climate is mild and agreeable, especially in winter, the thermometer ranging not lower than 57 degrees nor higher than 65 degrees. It is quite a winter resort for European invalids.

At Genoa we found it much too cold for comfort—down to freezing and windy—quite disappointing our anticipations of "sunny Italy." One is apt to forget that Genoa is as far north as Portland, Maine, and nearly as far as Halifax. The climate of Genoa is apt to be changeable and cold in winter, though not always freezing cold, while there is no adequate preparation for warming houses. Stone floors, damp linen sheets and miserable inconvenience of bath rooms and water closets are hardly compensated in the estimation of the average American by marble palaces, ancient traditions and paintings by the old masters.

The Riviera was milder and more agreeable. But I must not linger over the attractions of Nice, Villefranche, Monte Carlo and Mentone, the beautiful blue tints of the Mediterranean and the grand scenery of the Mediterranean Alps and the Cornice Road. They are known of all men and enjoyed every winter and spring by many people from more Northern climes. If only people knew it, our own Southern states would afford them equal pleas-

ures and benefits, and very much less discomfort. The crossing from Algiers to Genoa, as it happened, was so choppy that many passengers became seasick who had never succumbed before, but from Villefranche to Syracuse and thence to Malta, and afterward to Alexandria was delightful. Perhaps I will attempt to write something about these places and also Cairo, the Pyramids, Sakkara, Egypt generally and Jerusalem. But Egypt is a big subject, even from a strictly medical point of view, and Jerusalem—well there is no subject in the dissecting room that is more slimy or smells worse. Jerusalem is dead, a long time dead, and a great pity it was not mummified. Mummies are cleanly and sweet.

SAMUEL W. KELLEY.

“RUDOLF VIRCHOW FUND.”

To the American Medical Profession:

On October 13th, 1901, Rudolf Virchow will be eighty years old. When he completed his seventieth year a fund was started in his honor to enable the great master to facilitate scientific research by establishing scholarships, and by encouraging special medical and biological studies. Contributions to that “*Rudolf Virchow Fund*” were furnished by those in all countries interested in progressive medicine, as an homage to the man whose name is always certain to arouse admiration and enthusiasm.

In Berlin a large committee containing amongst others the names of A. Bastian, v. Coler, A. Entenbug, B. Fraekel, O. Israel, Fr. Koenig, C. Posner and W. Waldeyer has been formed to call for contributions which are to be added to the original “*Rudolf Virchow Fund*” so as to increase its efficiency. The committee expresses the opinion that in no better way, and in none more agreeable to the great leader of modern medicine, can his eightieth birthday be celebrated, and ask for the sympathy and co-operation of all those engaged in the study and practice of scientific medicine all over the globe.

The undersigned have formed a sub-committee for the purpose of making the American profession acquainted with the intentions of the Berlin committee, and urge their colleagues to participate in honoring the very man who has done more, these fifty years, than any other to make medicine a science, and international.

Subscriptions should be sent to their secretary, who will receipt therefor.

CHARLES A. L. REED,
President of the American Medical Association.
HENRY P. BOWDITCH,
President of the Congress of American Physicians and Surgeons.
WILLIAM K. WELCH,
Johns-Hopkins University.
ROBERT F. WEIR,
President of the New York Academy of Medicine.
A. JACOB, Secretary,
110 West 34th Street, New York.

Editors Cleveland Medical Gazette:

Dear Sirs:—To promote uniformity in results and to secure accuracy and give legal value to the evidence of X-rays it is necessary to standardize methods of doing the work. To this common benefit all X-ray experts are asked to contribute for the general good of the cause. You are therefore invited to write me your best suggestions on such of the following points as you can offer advice upon:

A standard uniform nomenclature for the principal terms required.

A standard form of record-blank for briefly filing reports and indicating all essential details of the exposure.

Standard of efficiency for tubes.

Qualities which a standard X-ray photographic plate should possess.

Qualities which a standard X-ray fluoroscope screen should possess.

Standard handle for all X-ray tubes so they will fit a standard tube-holder.

Standard tube-holder to fit uniform standard tube-handle—adjustable, rigid, holding tube without vibration—and convenient for general use.

Standard position of tube for correct shadow.

Standard distance of anode from plate for standard X-ray exposures.

Standard exposure times for chief parts of the body with a standard radiance.

Standard measure of different degrees of X-radiance.

Standard "skiameter."

Standard X-ray examination table, adjustable for all parts of the body.

Standard method of posturing each part of the body for a standard picture.

Standard means of fixing parts immovably during a standard exposure.

Standard complete definition of what a "standard exposure" should be (of medico-legal value).

Standard landmarks to be pictured in the negative as inherent proof that a standard exposure was made—(a medico-legal necessity).

Standard methods of localization for both "skiagraphy" and "fluoroscopy," which shall be the most practical, quick and uncomplicated.

Standard technique for picturing correct relation of bones and joints.

Standard technique for picturing details of any kind sought.

Standard technique for picturing contrast for diagnosis of soft parts.

Standard technique for picturing the different calculi, vesical, renal and gall-stones.

Standard technique for X-ray dental diagnosis.

Standard technique for X-ray eye work.

Standard technique for X-ray heart and lung diagnosis.

Standard treatment of plates to develop uniform results.

A standard leaflet of brief directions which the physician who does not do his own developing can send with his plates to any fair photographer as a ready guide to proper treatment of an X-ray negative to secure the picture.

Standard technique for therapeutic administration of X-rays with proper precautions.

You are invited to supply any omitted detail which you believe should be standardized. Will be pleased also to have you select one or more features of the above list in which you have had special experience and make a careful report upon what you regard as the proper standard to officially adopt. A reply is desired in about two weeks. In offering suggestions about standard working methods, postures, special devices, apparatus, etc., it is desirable that you send explanatory camera-photographs illustrating the details for comparison. Thanking you for your professional co-operation in behalf of the committee, I remain,

Faternally yours,

S. H. MONELL, M. D.,

Chairman of Committee on Standards,
47 West Twenty-seventh St., New York City.

Notes and Comments.

To Dr. and Mrs. W. E. Shackleton, on 9th April, a daughter.

Dr. Lincoln was called to Philadelphia in April by the death of his father.

Dr. and Mrs. Samuel W. Kelley have returned from their trip to the Orient.

Dr. and Mrs. C. B. Parker have returned from their trip through Mexico.

Dr. B. O. Coates, after being seriously ill for several weeks, is now able to be out.

Dr. John Perrier was confined to his home by sickness for two weeks during April.

Dr. D. B. Smith has removed his office from the Case Building to Room 315 The Arcade.

Dr. F. R. Packard, of Philadelphia, has been made editor of the *American Journal of the Medical Sciences*, vice Dr. Alfred Stengel, resigned.

Prof. Leopold Weiss, the well known ophthalmologist and extraordinary professor at the University of Heidelberg, is dead, aged fifty-two years.

Dr. and Mrs. Edward Lauder returned to the city on 28th after an absence of a week in Canada attending the funeral of Mrs. Lauder's father.

Dr. and Mrs. R. E. Skeel left Cleveland on 23rd April for Europe. The doctor will spend several months in study and in special clinics in the European hospitals.

Dr. Walter Myers, of the Liverpool School of Tropical Medicine, who has been carrying out investigations of yellow fever, has fallen a victim to his scientific devotion.

Dr. Frank Oakley has located in suite 855-857 Rose Building. The doctor is devoting his attention to Genito-Urinary and Venereal practice. He spent several months with Dr. Ferd. Valentine and Dr. Louis Heitzmann.

Dr. Daniel C. Gilman, president of the Johns Hopkins University, has resigned, the resignation to go into effect on September 1. Dr. Gilman has been connected with the university since its foundation twenty-five years ago.

Dr. Robert Coltman, Jr., former surgeon to Li Hung Chang and professor in the Imperial University at Peking, passed through San Francisco recently on his way back to China from Chicago, where he has been spending a much-needed vacation. He has a claim against the Chinese government for \$35,000. Three houses that were his property were leveled to the ground by the Boxers, and everything, with the exception of the clothes on his back, was confiscated by the rioters.

Medical Legislation in Colorado.—The Colorado Medical Liberty League, the Colorado Antivaccination Society, and the Spiritual Truth Society have instituted an active campaign against the passage of any bill regulating the practice of medicine in the State by law. Such bills have been introduced into both the Senate and the House, but it seems probable, from the tone of the newspaper reports, that the efforts to prevent the passage of any medical legislation will prove effectual.

Medical Society of the Missouri Valley.—The semi-annual meeting of this society was held in Omaha, March 21, under the presidency of Dr. V. L. Treynor, of Council Bluffs. After disposing of fifteen interesting papers the members repaired to the banquet hall of the Paxton and there regaled the inner man. Stimulated by the delicate viands and Allouez sparkling water, the flow of wit and humor was continuous throughout the evening. Dr. D. C. Bryant acted as toastmaster, introducing the following speakers: "Preventive Medicine and Politicians," Dr. V. L. Treynor; "How We do it in Missouri," Dr. Chas. Wood Fassett; "The Physician Himself," Dr. W. O. Bridges; "A Specialist's Opinion on Too Much Talking," Dr. Donald Macrae, Jr. The next (annual) meeting of the Society will be held in St. Joseph, September 19, after which the members will be tendered a complimentary outing to Eureka Springs, Arkansas.

The Anti-spitting Crusade.—On April 1st the board of health of New York city sent out seventy policemen of the sanitary squad in citizens' clothes for the purpose of arresting violators of the law regarding spitting on the floors of street and railroad cars and other public vehicles, ferryboats or public buildings. About twenty arrests were made in Manhattan and Brooklyn boroughs, the offenders being arraigned in the police courts. Some were held in \$500 bail for examination, some in \$50 bail, some were compelled to pay small fines, and others were discharged with a warning.

At the sixty-eighth annual meeting of the Tennessee State Medical Society the following officers were elected: Deering J. Roberts, M. D., (Southern Practitioner) Nashville, President; J. B. Murfree, Jr., M. D., Murfreesboro, L. A. Yarbrough, M. D., Covington, W. B. St. John, M. D., Bristol, Vice Presidents; A. B. Cooke, M. D., Nashville, Secretary; W. C. Bilbro, M. D., Murfreesboro, Treasurer. Next place of meeting: Memphis, Tenn., on the second Tuesday in April, 1902. A. B. Cooke, M. D., Secretary.

The announcement is made that the German government has established a quarantine against vessels from Cape Town.

A bill has been introduced into the Michigan legislature to provide Detroit with a free hospital, to cost that city \$100,000.

The London County Council has appropriated and decided to spend \$250,000 as a precautionary measure against the bubonic plague.

The new Platt Pavilion for the isolation and treatment of cases of contagious ophthalmia has just been opened at the New York Eye and Ear Infirmary.

The Canadian department of Indian affairs is considering the advisability of training Indian girls at the industrial school at Brandon, Manitoba, in general nursing.

An anonymous donation of \$100,000 has been received by the Yale Medical School. The money will be used in building a laboratory of clinical medicine and surgery.

Fifteen Thousand Dollars has been given anonymously to endow three beds in the children's ward of the Post-Graduate Medical School and Hospital of New York city.

An ordinance was recently passed by the Council of Sioux City, Iowa, compelling the inoculation with antitoxin of all members of families in which there is a case of diphtheria.

It has been estimated by the Health Department of Chicago that 4,500 lives have been saved in that city during the last five years by the use of antitoxin in the treatment of diphtheria.

The Cause of Cancer—Professor Gaylord, of the University of Buffalo, claims to have discovered the cause of cancer. He was to lay his evidence before the faculty of the medical department of the University of Buffalo on the 4th inst.

A new journal, entitled the *New York University Bulletin of the Medical Sciences*, will soon be issued. It will be edited under the auspices of the New York University Medical Society.

It is said that there is still standing in the island of Cos a tree under whose spreading branches, tradition says, Hippocrates taught the art of healing nearly 2,500 years ago. It is a plane tree; its leaves come out every spring, but the two largest branches have been shored up by pillars of brick.

On Thursday, 18th April, Park, Davis & Co., of Detroit, entertained Dr. J. G. Spenser, Dr. J. B. McGee, about forty students from College of Physicians and Surgeons, and about fifty students from the medical department of Western Reserve University. The day was occupied in going through the various laboratories.

At the International Congress on Tuberculosis which is to be held in London in July, an address will be delivered by Professor Robert Koch, on Tuesday, July 23; one by Professor Brouardel, dean of the medical faculty of the University of Paris, on Wednesday, July 24; and one by Professor McFadvean, principal of the Royal Veterinary College, London, on Thursday, July 25.

In the list of candidates for the post of interne of the Paris hospitals who have been successful in the recent examination there occurs the name of Mlle. Marthe Francillon-Rouville, who gained the fifty-second place among more than 600 competitors. This lady is, according to the *Progres Medical*, the first French woman who has obtained the much-coveted title of interne des hopitaux.

To Compel Hypnotists to Take Out Licenses.—The Senate committee on public health, at Albany, on April 3d, favorably reported Senator McCabe's bill compelling all persons professing to practise hypnotic treatment to take out a license. No license will be issued to hypnotists who have not put in four years of study and passed a successful examination.

A Letter Blamed for an Epidemic of Smallpox.—An epidemic of smallpox at Saginaw, Mich., seems to have been traced to a letter. The official in charge of the quarantine squad traced the fact that the first patient was a young lady who had recently had a letter from her lover, a soldier of the United States army in Alaska, in which he stated that he was just recovering from smallpox. The epidemic seemingly started by this letter is said to have had altogether thirty-four victims.

Two Women Doctors in South Carolina.—Two young women have just been graduated from the Medical College of South Carolina. They are the first women graduates of the institution and also of the State.

Unlicensed Practitioner Fined.—An unlicensed practitioner who was arrested in February at Stanley, Wis., for practicing medicine without a license, has been fined fifty dollars. The fine has been withdrawn on his promise not to continue to practice.

A Medical Library for Milwaukee.—The Milwaukee Medical Society has appointed a committee to investigate and report upon a proposal which has been made for the establishment of a medical library in a new office building where quarters have been offered rent free.

A hot fomentation that will not require to be changed frequently can be made by dipping a flat section of sponge in hot water. Apply to the part, and upon sponge place a hot-water bag. If desired, the water in which the sponge is dipped may be medicated.—*Medical Dial.*

Physicians for the Newfoundland Sealing-Fleet.—For the first time in the history of the Newfoundland sealing-fleet, says the Canadian correspondent of *The Lancet*, physicians accompanied it. The fleet numbers about six thousand sailors, and left St. John on March 9th.

Vaccination Prosecutions in England.—The authorities of Leicester, the great anti-vaccination town of Great Britain, began the prosecution on April 3d of 60,000 defaulters under the vaccination acts. Six test cases had been started, but all had been withdrawn for various causes.

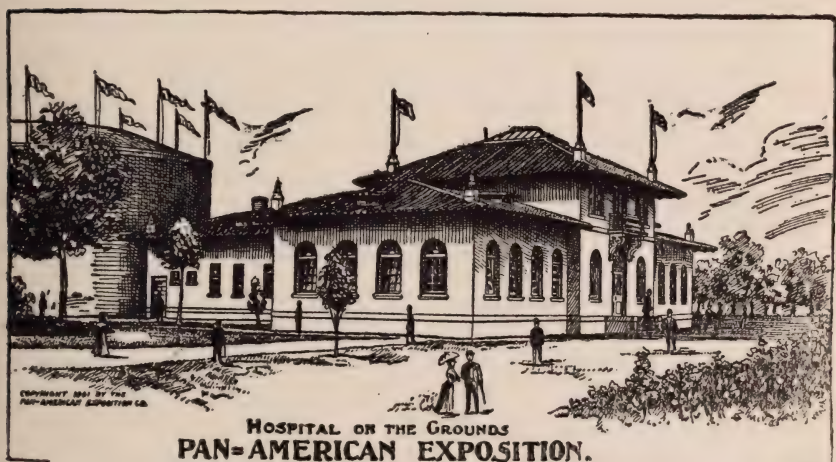
Sterilizing Money.—The Cheshire National Bank, of Keene, N. H., has recently taken a very unusual precaution. Scarlet fever is epidemic in that town, and to prevent its spread the bank has put in a sterilizing oven, in which all the money which passes through its hands is to be sterilized.

A congress of marine hygiene will be held this summer at Ostend. An international exhibition of marine hygiene and appliances for the saving of life at sea will be held on the occasion under the auspices of the Communal Administration. The King of the Belgians has accepted the title of High Protector of the exhibition. Further information may be obtained from the general secretary, Rue des Soeurs Branches, No. 18, Ostend.

Emergency Hospital at the Pan-American.—How Exposition visitors will be taken care of when they fall ill.

A very pretty hospital building stands near the west end of the Mall. Floor area rather than elevation is a prominent feature in the construction of this important adjunct to the exposition. Utility, first, last and all the time is the prime consideration in this design, though it is by no means a case of utility unadorned. In conformity with the general exposition plan the free Spanish renaissance has been treated, in this instance, with a strong leaning towards the old mission interpretation.

Having a frontage of 90 feet on the Mall, the main wing has a depth of 38 feet with a height of but one story, except in the



center, where it assumes the form of a square tower with a rounded top. This tower attains to the pretentious height of two stories, surmounted with two flagstaffs. One staff supports the exposition flag and from the other waves the well known Red Cross banner, the only universal, international emblem that is recognized and revered in all countries.

A rear wing one story high runs back from the center portion a distance of 56 feet with a width of 32 feet. This form of construction lends itself readily to this picturesque reminder of the early struggles of our first missionaries.

Color, here as everywhere throughout the grounds, adds its mantle of beauty to the odd and in many cases obsolete methods of construction, penetrating, rather than clothing the building in

the warm changing tints of the sunset. A low wandering adobe mission house covered with heavy red tiling, its weather stains retouched by the gorgeous rays of the departing sun, may be readily imagined while looking at this rehabilitation of the past.

Any antiquated illusion that may be conveyed by the outside appearance of this building is, however, at once dispelled by a visit to the interior.

Modern arrangements that are both convenient and sanitary mark every feature. Approved medical and surgical appliances have been carefully selected in regard especially for their adaptability to emergency work and the exigencies that are likely to arise.

The main hospital entrance is from the Mall opening directly into a handsome rotunda decorated with tropical plants and suitable hangings of pictures, drapery, etc.

The main office is situated at the farther left hand corner of this rotunda where it is carefully tucked away under the staircase, forming an irregular alcove. It contains telephone and electrical annunciator, and messenger call service, with other modern and necessary appurtenances. As this is lighted from above and encircled by a round gallery opening through the upper story the effect is very pleasant and agreeable. The first floor contains in the extreme western wing, two male wards with seven cots each, a bath room, physicians' office, a morgue and a linen chest. The eastern wing contains a woman's ward, large enough to hold a dozen cots, with direct communication to the woman's bath room. This wing also contains an office for the superintendent of nurses, private physicians' office, a linen closet and other conveniences.

The upper story is intended for the use of the resident physician and the necessary attendants. It is fitted up with four pleasant, comfortable bed rooms and a bath room. The rear wing extending back from the main entrance contains the operating room, sterilizing department and instrument cases. Immediately across the hall is the emergency bath room and patients' waiting room. Still farther down the corridor is located the kitchen, pantry and dining room, which is intended for the use of patients only, as the staff have their culinary department in the service building, situated but a few yards distant. In the extreme southern end of this wing is the storage room for the electrical ambulances; this room also contains a station for recharging the batteries; electricity for this purpose being brought from an electric circuit provided for the electric launches on the Grand Canal. In addition to the two

electrical ambulances, a steam or gasoline motor ambulance will be provided to be ready in case of a possible failure of the electrical current. The building is provided with natural gas for heating purposes and for cooking when necessary for the patients.

Water, gas and electricity is carried to every part of the hospital in the most approved manner.

The building is plastered throughout and rendered sanitary and germ proof so far as possible, in every instance. The staff in attendance are uniformed to grade according to universal custom.

In the matter of equipment and appliances, everything is of the newest and best. A new litter attracts considerable attention; it is carefully balanced and so arranged that one attendant can operate it easily and noiselessly as it runs on two wheels about 20 inches in diameter which are fitted with large inflated rubber tires. Sterilizing apparatus with an apartment for instruments and another for towels and linen is another necessary arrangement.

Roswell Park, M. D., is the director; Vertner Kenerson, M. D., deputy director, and Dr. Alexander Allen is the resident physician, a staff which will at once, inspire confidence in all who are acquainted with these gentlemen or their work. The efficiency of this department is an illustration of the manner in which the exposition is designed and executed in all its departments. Everything has been carefully arranged according to a great comprehensive plan, the details of which have been worked out in every instance with careful, conscientious precision.

In regard to the importance of this adjunct to the exposition it may be said that up to the first of March 504 cases have been treated on the grounds, only one of which proved fatal. These include all forms of sickness and accidents to workmen employed upon the construction work. In this connection it is well to note that the number of cases treated at the Omaha Exposition was about three thousand, while the history of the hospital at the World's Fair in Chicago gives a total of 11,602 medical and surgical cases treated, resulting in 69 deaths.

It is hoped to have less use than this for the hospital at the Pan-American, though in the immense crowds who will attend, no doubt many individuals will have occasion to appreciate the provision that has been made in this direction.

Asphalt and Public Health.—From the recent discussion on the relation of good pavements to sanitation these statistics have been culled, and certainly emphasize the necessity for continuing

the agitation by the medical profession—the real leaders in all sanitary movements:

“And now come figures that may well claim our attention. The death-rate of Buffalo, where all the pavements are of asphalt, is 19.6 per 1,000; in St. Petersburg, with cobble and macadam, it is 30; in New York city it decreased from 38.37 in 1892 to 26 in 1896, the time when the era of clean streets began.

“While it is, of course, impossible to assign to all the various sanitary factors which operate to reduce disease their precise value, such comparative figures as those last given have almost the force of a demonstration. They certainly are a powerful additional incentive to the extension of the system which fortunately presents other features which commend it to favor.

It is predicted that the Triumphal Bridge at the Pan-American Exposition will surpass in beauty the great Alexander bridge at the Paris Exposition.

Winston Spencer Churchill, M. P., says he found the Pan-American Exposition well advertised in Pretoria, South Africa.

Canada will have a building at the Pan-American Exposition, and make a comprehensive display of the country's great resources and industries.

The biggest things in the way of guns ever produced will be exhibited at the Pan-American Exposition.

A searchlight on the Electric Tower of the Pan-American Exposition will cast rays for a distance of fifty miles.

Mark Twain Defends Osteopaths.—Mark Twain appeared before the committee on public health of the Assembly of the State of New York on February 28th in behalf of a measure introduced by Mr. Seymour designed to license osteopaths. Mr. Clemens did not profess to know anything more about osteopathy than that he had been treated by an osteopath in Europe and been benefited by the treatment. His interest, he said, was in the preservation of personal liberty. He said that as we had full liberty of choice in selecting spiritual advisers, we should have the same liberty as regards advice regarding the care of our bodies. A large delegation from the New York County Medical Society appeared in opposition to the bill. Speeches in opposition to the measure were made by Dr. Elliot Harris, Dr. Floyd Crandall, Dr. Frank Van Fleet, Dr. Charles N. Dowd, Dr. Henry D. Didama, regent of the Medical University of Syracuse, and Jacob Bolin, the president of the New York Society of Masseurs.

A Bill to Abolish Coroners in New York City.—Assemblyman Henry, on April 3d, introduced at Albany a bill to abolish the borough coroners and coroners' physicians in New York city, and establish in lieu thereof a staff of medical examiners, thirteen in number, at an annual salary of \$5,000 each.

American Proctologic Society, Third Annual meeting held at Hotel Aberdeen, St. Paul, Minn., June 4th and 5th, 1901.

Program. Order of Business: Executive Meeting. *a.* Reports of Committees. *b.* Reading of Papers and discussion of same. *c.* Demonstrations by Clinics and presentation of specimens. Dr. Martin will present: 1. A Case of Naevus in the Second Rectal Chamber. 2. Presentation of a Specimen of Congenital Hyperplasia and Coarctation of the Rectal Valve. *d.* Report of Committee on Progress of Proctologic Literature during the past year.

President—Dr. James P. Tuttle, New York. Vice President—Dr. Thomas Charles Martin, Cleveland. Sec'y-Treas.—Dr. William M. Beach, Pittsburg.

Executive Council: Dr. Samuel T. Earle, Jr., Baltimore. Dr. A. Bennett Cooke, Nashville. Dr. J. Rawson Pennington, Chicago.

First Day. 1:30 p. m. Meeting of the Council. 2: p. m. Executive Meeting. *a.* Reading of Minutes. *b.* Treasurer's Report. *c.* Report of Council. *d.* Reports of Committees on other than Scientific Subjects offered. *e.* Unfinished Business. *f.* New Business. 3:00 p. m. President's Address, Dr. James P. Tuttle, New York. 3:30 p. m. Reading of Papers. Primary Tuberculosis of the Rectum and Anus with Report of Cases, Dr. Leon Straus, St. Louis. Disease of the Sigmoid, Dr. George B. Evans, Dayton, O. Report of Two Cases of Valvotomy, Dr. Samuel T. Earle, Baltimore. Treatment of Prolapse of the Rectum, Dr. J. Rawson Pennington, Chicago. Foreign Bodies in the Rectum, with Report of a Case. Dr. Lewis H. Adler, Jr., Philadelphia.

Second Day. 1:30 p. m. Reading of Papers. A Study of Simple Ulceration of the Rectum from a Clinical Standpoint, Dr. A. Bennett Cooke, Nashville. A New Method for the Painless Removal of Hemorrhoids, Dr. Thomas Charles Martin, Cleveland. Anal Pockets, Dr. Louis J. Krouse, Cincinnati. The Treatment of Recto-Colitis, Dr. William M. Beach, Pittsburg. Paper, Dr. George J. Cook, Indianapolis. 4:30 p. m. Executive Meeting. Reading of Minutes. Election of Members and Officers. Miscellaneous Business. Adjournment.

The following officers were elected at the Sixth Annual meeting of the Western Ophthalmologic and Oto-Laryngologic Association held in Cincinnati April 11th and 12th:

Dr. C. R. Holmes, Cincinnati, O., President. Dr. W. L. Dayton, Lincoln, Neb., 1st Vice-Prest. Dr. J. O. Stillson, Indianapolis, Ind., 2d Vice-Prest. Dr. H. W. Loeb, St. Louis, Mo., 3d Vice-President. Dr. O. J. Stein, 100 State St. Chicago, Treasurer. Dr. William L. Ballenger, 100 State St., Chicago, Secretary.

At the meeting in Cincinnati the scientific program was of very high grade. Forty new members were elected. The next meeting will be held in Chicago, April 10th, 11th and 12th, 1902.

Marriage Control in Indiana.—The Indiana Legislature has passed a bill providing for the appointment of a marriage commission, to be composed of two women who are mothers, two physicians of note, and one attorney. The duties of the commission are to prepare a set of questions which it is proposed to require candidates for marriage licenses to answer, the idea being to prevent marriage between the unfit.

Wedding of a Physician which Cost Thirty Thousand Miles Travel—The Sunday Sun, March 24th, has this clipping from the *Evening Wisconsin*: Dr. Henry M. Bridgman, Cape Town, South Africa, and Miss Florence R. Jones, of the Argentine Republic, formerly teacher in the Racine High School, were married recently in Racine. The newly wedded pair will leave for Kimberley, South Africa, their future home, and when they arrive there, they will have traveled nearly thirty thousand miles to be married. The bride-elect was giving private instruction to a family of children in the Argentine Republic when she first met Dr. Bridgman, and he soon after went to Cape Town and began practice, and when the engagement was announced Miss Jones traveled alone to Racine and the doctor came on from South Africa.

Hospital Investigation Demanded.—Attorney Tobin of this city has made a protest to the Speaker of the House against the passage of the bill appropriating State money to the West Penn Hospital of Pittsburg and asks for a legislative committee to investigate charges which he prefers against the hospital authorities. Mr. Tobin is attorney for the widow of William H. Daley, a Philadelphian, who died in the West Penn Hospital in February, 1900, under circumstances which gave rise to much comment at that time.

THE Cleveland Medical Gazette

JUNE, 1901.

Original Articles.

THE DIAGNOSIS OF MENINGITIS.*

BY CHARLES J. ALDRICH, M. D.

Lecturer on Clinical Neurology and Anatomy of the Nervous System
Cleveland College of Physicians and Surgeons; Visiting Physician
and Neurologist to the Cleveland General Hospital and Dispensary; Neurologist to the Cleveland City Hospital.

At the close of the year, as President of the Cuyahoga County Medical Society, I desire to thank the officers and members for their cordial support and co-operation, without which my services would have been barren and without worth. I have only a sentence of recommendation as to the future of the society. *Do more and better work.*

It is far from my purpose to indulge in sounding praises and empty platitudes in this closing address, but prefer to spend the remaining minutes of my presidency in speaking upon a subject which ever possesses a keen interest to both general practitioner and neurologist. I refer to the *Diagnosis of Meningitis*.

History of the Case.—The anamnesis of every patient suspected of having meningitis is important. Careful inquiries should be made into the family history in reference to the determination of his nervous status from an hereditary standpoint. The question of hereditary syphilis and tuberculosis should be most carefully deliberated. The statement of the cause of death in any one of the near relatives should not be accepted without the corroborative evidence to be obtained by eliciting a history of the last illness. The habits, occupation, residence and associations should be carefully inquired into, since it is possible that the patient may

* The retiring address of the President of the Cuyahoga Medical Society, April 4, 1901

have been visiting some district wherein there is an epidemic of cerebro spinal meningitis; or it is possible that his occupation makes him particularly open to inoculation by the bacillus of tuberculosis. An instance of this kind occurred not long since in the case of a young woman who was employed as a tailoress, and who was attacked with a meningitis which was diagnosed as tubercular. This diagnosis was made largely upon the known fact that those engaged in tailoring establishments are particularly liable to infection by the bacillus of tuberculosis. In two cases of tubercular meningitis in childhood I have been able to trace a probable origin; one in a child who often played with a little girl who had a discharging hip abscess; the other child was a favorite of a tubercular neighbor who spent much time in playing with and caressing his little friend. The presence of tuberculosis in the family does not predicate a direct infection, but does predicate an inheritance of that particular type of constitution which is peculiarly susceptible to tubercular infection.

The Onset.—The mode of onset varies widely and possesses diagnostic value. The violence of the onset is sometimes so marked that death occurs in a few hours after the first symptom. This is most common in the epidemic variety of cerebro spinal meningitis which usually lacks the prodromal symptoms of the tubercular form. Rapid onset is very unusual in tubercular meningitis. The onset of the epidemic variety is not always sudden. Cases occur wherein pronounced symptoms are marked and prolonged. A recent case, seen at Brecksville with Drs. Keeley and Knowlton, complained of malaise, articular and myalgic pains with some swelling of the joints nearly two weeks preceding the development of the cerebral symptoms. The onset of primary pneumococcic meningitis may come suddenly and without warning, but latency is the rule.

Headaches.—The head pains of meningitis possess two notable characteristics—severity and persistency.

Any patient old enough to give an intelligent account of the symptoms will complain of headache. It is usually early, racking and persistent, and subject to but little remission. Children so young as to be unable to give other account of their symptoms will frequently complain bitterly of the headache in the beginning of the disease. Vertigo is also present and spinal pain is often complained of.

Sensory Disturbances.—Hyperesthesiae of the skin and special senses are usually present. Sensitiveness to light and sound

and even touch is very marked in some cases. Hyperesthesia of the skin is quite constant, but hyperalgesia is, however, more certainly found. In the more severe cases which the writer has recently observed, there appeared to be a very great sensitiveness to cold. On questioning the patient carefully as to his sensations, we were impressed with the idea that it is not the cold sensation alone that is disagreeable, but the contact of cold with the skin produces actual pain, which it would be proper to term hypercryalgia, or a condition of the skin in which the sensation of cold is interpreted as pain.

Convulsions.—Like the onset of most of the grave infections of childhood, meningitis is often ushered in with convulsion. On the other hand, cases run a fatal course with only a few muscular twitchings which do not approach the dignity of a convulsion. The type of the convulsions of meningitis is as variable as the classification will admit. General spasm, hemispasm and monospasm may occur in any case, or alternate in the same case. In degree they vary from a slight twitching of the eyes to a violent epileptiform convulsion. They may occur at wide intervals, or the cortex of the brain become so irritable that a constant convulsive state may be said to exist in which the general hyperesthesia is so great that touching the bed, a loud sound, or a breath upon the body will result in a violent convulsive explosion.

Facies and Posture.—The facies and posture of meningitis are peculiar and striking. The patient is usually found lying upon the side with the head drawn backward, the posterior outline of the back concave, the knees drawn up and the arms tightly folded across the chest. If aroused for examination, even in a darkened room, the facies will take on an expression that is ordinarily seen when the well are awakened from sleep by a strong light thrown upon the face—the palpebral apertures are narrowed by the tightly drawn lids, disclosing a gleam of the congested eye, the brows are contracted into a frown, the upper lip drawn up, disclosing the teeth often covered with sordes, the nostrils distended and over all an expression of querulous irritability—a picture hard to describe, but once seen and comprehended never forgotten. Later in the disease when the cerebral symptoms are those of pressure the patient usually lies on the back with the head drawn back; mouth open; respiration irregular; restless and muttering or completely comatose; bilateral, or more often unilateral ptosis, wide pupils with half-opened and unwinking eyes.

Mentality.—If the patient is aroused by questions, you immediately perceive a degree of apathy, mental obscuration and drowsiness, varying in different persons and in different stages of the disease. Delirium is not usually an early symptom—if present it is generally of a wandering type and is not infrequently subject to remissions. After the patient is aroused sufficiently to appreciate his surroundings and answer questions—and often these questions have to be repeated several times before they are comprehended—almost the first complaint will be the severe pain in the head. Patients are sometimes violent and maniacal, requiring restraint and constant supervision in order to prevent their doing harm to themselves and others.

Pulse.—The pulse has some qualities which should be carefully examined. It may be rapid in some cases when the temperature is low, or extremely slow when the temperature is high, but its most constant and striking characteristic is a wide variation in rate, presenting in one quarter of a minute variations from three to twelve beats from the preceding quarter. This form of variability is not so frequent as the wide difference of the rate observed during the twenty-four hours; at one visit it may be eighty to the minute, at the next one hundred and twenty, without any appreciable change in the patient's other symptoms. This changeable pulse is characteristic of the early stages, a slow pulse often as low as thirty-five to the minute is observed when pressure from the accumulating inflammatory exudate takes place.

Temperature.—The fever of meningitis is most variable. Not one of the forms of meningitis present a temperature curve approaching a constant type. In the epidemic variety it is extremely variant, it may be normal in the beginning and in severe cases will not infrequently run a very low course. In those cases which present considerable fever it is not uncommon to have remissions in which the temperature will return almost to normal. In other cases the temperature will run a very high course almost from the beginning. Other cases will present a temperature curve singularly like that of typhoid, faithfully presenting the characteristic daily remissions. Occasionally cases will show a temperature curve hardly varying more than a degree for days and even weeks; these cases are usually very severe and the temperature rarely exceeds 102 degrees F. In certain cases chills occur and closely resemble those of malaria, and the temperature curve may add to the deception and cause the case to appear very much like a plasmodial infection. The temperature of tubercular meningitis pre-

sents widely varying changes, but as a rule I believe the temperature presents a lower curve. It is possible to have a tubercular meningitis with no change in temperature for days and even a week, presenting all the classic symptoms of meningitis with a normal temperature.

Respiratory Tract.—A severe coryza is not infrequently one of the early symptoms of the epidemic variety. It seems to differ but little from the ordinary influenza except that the scleral and ocular subconjunctival vessels may be congested far out of proportion to the vessels of the palpebral conjunctiva.

The respiration of a patient with meningitis frequently exhibits phenomena that possess diagnostic significance. In the early stages of the disease the respiration is hurried out of proportion to the rapidity of the circulation and height of the fever. It is rarely disturbed in rhythm until pressure symptoms become manifest.

I have observed one respiratory change in meningitis so often that I believe it possesses diagnostic value. In the normal act of inspiration the abdominal walls are expanded but on expiration retracted. In meningitis the contrary often obtains, i. e., *there is retraction of the walls of the abdomen during inspiration and the descent of the diaphragm*. This is probably produced by the hyper-tonus of the muscles which is a constant and early symptom of meningitis. Arrhythmic respiration is usually a late symptom of the disease, Cheyne-Stokes' respiration always. We may, however, have some disturbance of the rhythm early in the disease if the effusion into the meninges is sudden, early and large.

Vomiting.—Vomiting is at times a very persistent and distressing symptom. It occurs both with and without nausea. Vomiting is usually an early symptom and in children is often projectile in character; it usually ceases when the irritative stage is merged into that of cerebral pressure.

Abdominal Symptoms.—Retraction of the belly is quite a constant symptom in meningitis, but is most often seen in the tubercular variety. Not uncommonly a hard scaphoid belly similar to that of an appendicitis is met with. Constipation is the rule and sometimes becomes extremely obstinate at which times we may have abdominal distention. In the typhoidal types of the epidemic variety the tongue is dry, teeth covered with sordes, abdomen tympanitic and diarrhea may be extremely persistent. I have recently examined a patient that complained bitterly of gastro-intestinal pains and quite a marked degree of tenesmus, notwithstand-

ing the fact that there was no diarrhea present. The desire for urination was also very frequent, the latter is not an uncommon symptom in the early manifestations of the disease.

Genito-urinary System.—Retention of the urine is seen late in the disease and is probably due to the spasmodic contraction of the sphincters rather than the hebetude and anesthesia incident to the later stages of the affection. A trace of albumin is often discovered in the urine and a mild hemorrhagic nephritis is not rare.

Muscular System.—The muscular system presents some phenomena that are extremely important from a diagnostic standpoint. In almost all cases a certain amount of rigidity and soreness of the neck is experienced, which may amount to extreme rigidity early in the disease. Sometimes in the later stages of the prolonged and fatal cases this rigidity entirely disappears, but not infrequently it persists for some weeks after recovery has taken place. Soreness, stiffness and pain in the muscles are almost always complained of.

Kernig's Sign.—Rigidity and contracture of the legs and arms are usually late symptoms, but early in the disease a certain amount of rigidity of the back, arms and especially of the legs may be brought out by bringing the patient to a sitting posture. This was described some years ago by Kernig, and recently advanced by Netter and others, as a very constant and oftentimes early symptom of meningitis. I believe it to be a very important sign of meningeal inflammation. And while I occasionally meet it in diseases other than meningitis I find it so constant in all forms of leptomeningitis that I have grown to regard it as a symptom upon which we can place a great deal of reliance. It really consists of a hypermyotonus of the muscles, that is an abnormal increase of muscular tone. The same phenomena is evidently responsible for the peculiar behavior of the abdominal muscles in respiration. The stiffness and rigidity of the muscles of the neck and opisthotonos, and posture with the thighs flexed upon the abdomen and the legs upon the thighs, the fore arms upon the arms and the arms upon the chest, undoubtedly owe their origin to this muscular condition which I have proposed to name hypermyotonus or excessive muscular tone.

Reflexes.—The reflexes are often exaggerated early in the disease and are commonly inhibited in the later stages. The ankle clonus and the jaw-jerk are often present, but the reflexes vary so much that, at the best, they afford corroborative evidence only. Irregular muscular twitchings and contractions are commonly ob-

served, and contractures may develop which are very obstinate and not infrequently permanent.

Cutaneous Eruptions.—Quite frequently different forms of eruptions are met with as an early symptom of the disease. There seems to be no fixed type to which these eruptions conform. I have met with those that were herpetic, petechial, hemorrhagic and bullous. Herpes on the face is very common, and when added to the peculiar facies before described, form a picture not easily forgotten. In the case of herpetic eruption on the face, the cornea is very apt to suffer ulceration. The corneal lesion is likely the result of an inflammation of the cranial nerves, as most corneae which present this condition are insensitive in a varying degree. Koplik has recently found the diplococci intracellularis in the secretions of an inflamed conjunctiva of a patient ill with epidemic meningitis.

Two years ago in consultation with Dr. Smith, of Collinwood, I saw a case of epidemic cerebro-spinal fever that presented a very marked petechial eruption, particularly upon the wrists, neck and face, a perfect type of the disease as it appeared in former years and which gave to the affection the appellation of spotted fever; and I have recently seen a case that presented a small petechial eruption on one wrist and a typical development of erythema nodosum upon the shins which appeared just before the development of the cerebral symptoms. *Tache Cerebral*, (those peculiar welt-like marks so easily produced upon the skin in meningitis by the stroke of the finger nail) is quite constantly present early in the disease.

Eyes.—Early in meningitis there is great sensitiveness to light, and the pupils usually respond to both light and accommodation, but are small. This is in the irritative stage. The small pupils result from cortical irritation and constitute a true cortical miosis. It is not infrequent that the irides are so spastic as to prevent response to light and accommodation. Later in the disease when the effusion produces pressure on the cortex, the pupils become widely dilated and then usually fail to respond to light.

I have noticed a peculiar action of the pupils in several cases in which the symptoms indicated intense cerebral irritation. When the eye was pulled open the pupil was found to be small and would *dilate when exposed to light*. I believe this paradoxical reaction of the pupil to light is due to irritative miosis which is exerted as long as the patient is making no effort to see; as soon, however, as he attempts vision the pupil dilates to admit the quantity of

light which is found necessary for the correct formation of the retinal image. I think that it is a symptom of importance and so far as I am aware it has not been observed by others.

Drooping of the lids on one or both sides is not infrequently met with late in the disease, and often disappears and reappears in such cases. One day a complete or partial ptosis may be observed which the next day has disappeared only to reappear later. Paralysis of the internal rectii muscles is very frequently seen with a resulting divergent squint. This usually occurs late in the disease and is very important since it serves to differentiate a genuine meningitis from the irritative affections of the brain secondary to the acute gastro-intestinal infections of children, and which commonly present a convergent squint.

One very striking symptom seen in meningitis and also met with in the pseudomeningitis of children is an unwinking half-open eye. Nystagmus of the lateral type is quite frequently met with early in the disease in those patients who yet have sufficient intelligence to aid you in making the test.

Loss of sight in meningitis is frequent; sometimes the suddenness of its development is very striking. I recall a case of tubercular meningitis which developed sudden blindness and wild delirium in the space of two hours. This was believed to be due to a sudden and large effusion, which was later proven by lumbar puncture. The withdrawal of $3\frac{1}{2}$ ounces of fluid was followed by a return of sight and consciousness. Examination of the disks usually show fullness of the vessels and marked hyperemia. Later in the disease a genuine choked disk is not infrequently seen and many of the cases which recover suffer extensive and permanent damage to the visual tract. I recall two cases of blindness as a result of retrobulbar optic neuritis, complicating and following meningitis.

Hearing.—Affection of the auditory nerve is sometimes indicated by a dullness of hearing that is out of proportion to the mental hebetude manifested early in the disease, and not a few deaf-mutes owe their affliction to an attack of meningitis in infancy. It is not difficult for one with experience to recall a number of such unfortunate cases.

Paralysis.—Paralysis of any member, or any combination of members is possible in the later stages of the disease, but ocular palsies are the most common.

Affections of the Joints.—Pain in the joints with swelling is not uncommon in cerebrospinal fever and the inflammation may

go on to suppuration. The diplococcus intracellularis has been found in the pus from such inflamed joints.

The Blood.—The blood presents a leukocytosis in almost every case of meningitis. It is of the polynuclear variety and in cerebrospinal meningitis is particularly marked. It does not possess, however, any special value in the differential diagnosis of the various forms of meningitis, but I believe that it is claimed that it does not occur in *meningitis serosa*. It has been stated that leukocytosis does not occur so frequently in tubercular meningitis as in the other forms. This does not obtain, since almost all of the cases of tubercular meningitis present an increase of leukocytes. In the epidemic variety leukocytosis is an early symptom and persists to the end of even the protracted cases, and even after recovery seems to have been established. Therefore, an examination of the blood is a very important matter in making a differentiation from typhoid fever which meningitis not infrequently simulates. In pneumonia where leukocytosis is quite constant its presence possesses little differential value. On the other hand as a means of differentiating between meningitis and the spurious meningitis so frequently seen in the gastro-intestinal affections of childhood it is most important, since the latter cases do not, as a rule, show a leukocytosis.

Lumbar Puncture.—Perhaps the greatest step toward accuracy in the diagnosis of meningitis has been made possible by lumbar puncture. This method was introduced by Quinke. He found that by inserting a needle into the lumbar space below the termination of the cord proper, it was possible to withdraw any extra amount of fluid which existed within the membranes. This has been found to be a very harmless procedure, easily executed and very certain in the knowledge conveyed. The amount of fluid which it is possible to withdraw in a case of meningitis varies greatly. Cerebrospinal fluid normally is a non-albuminous fluid of low specific gravity and as clear as distilled water. In meningitis we have a great increase of fluid, as we would expect from an inflammation of the membranes. In addition to this we have visual, chemical and microscopical changes in the fluid. The visual changes vary greatly in the various forms of meningitis, and in the different stages, and also in individual cases. Often-times the fluid appears clear but on comparison with a test-tube filled with distilled water will show a perceptible turbidity when the meninges are inflamed. Not infrequently there appears small floculi, at other times a general turbidity and again an almost

puriform condition of the fluid may exist. The tubercular variety often presents a fluid free from flocculi and opalescence. On the other hand, the septic forms of meningitis constantly show a great turbidity. The epidemic variety of meningitis often presents a comparatively clear fluid in the beginning, which later may become turbid and still farther on in the disease, particularly if it tends to recovery, the fluid will again clear. The chemical changes consist usually in the disappearance of the small amount of sugar found in the normal fluid and in the appearance of albumin. I regard the former as an extremely important test.

In the winter of 1898 it was observed by myself at the City Hospital, and corroborated by House Physicians Stern, Hole and Hoffman that when a test-tube containing a column of cerebrospinal fluid drawn from a case of meningitis, was allowed to stand without agitation for twelve to twenty-four hours a thin filament of fibrin formed in the center of the column of fluid and seemed to be suspended from a delicate pellicle at the top and extending down to the bottom of the tube. The writer suggested the possibility of this fibrin thread being certain evidence of the inflammatory nature of the exudate, and also the probability that within its delicate mesh we might find entangled the few cells which an apparently clear fluid might contain. The fibre was lifted out with a platinum loop, spread on a cover glass, fixed and stained, and sure enough the cells with their contained diplococci were revealed. This fibre was obtained in fluid which to ocular inspection appeared to be clear.

The writer has many times confirmed these observations and regards them of peculiar value to those who lack opportunities for the use of the centrifuge, microscope and cultural studies. In three cases of brain tumor the filament was not present in the cerebrospinal fluid, nor was it in the fluid drawn from the lumbar space of a man unconscious from uremic poisoning, and from one dying from a dural hematoma.

When Dr. Walter G. Stern was in Vienna in the winter of 1899, he heard Dr. Robert Breuer, first assistant to Prof. Nothnagel, call attention to this filament of fibrin and ascribe to it the same diagnostic importance which I had given it in 1898. I am not aware that anyone called attention to it before I reported it to the Cleveland Medical Society in the winter of 1898.

Microscopic and cultural examination of the fluid are quite frequently necessary and often determine the presence of the diplococcus intracellularis, bacillus tuberculosis, pneumococcus, or

some of the various pus-cocci or other germs which may be present, thus disclosing the exact nature of the meningeal inflammation. Failure to find any bacteria in the fluid, absence of sugar, and presence of fibrin and albumin should cause one to suspect a tubercular meningitis, since it is infrequent that we find the bacillus of tuberculosis in the fluid withdrawn by lumbar puncture. In a series of cases of meningeal tuberculosis I have noticed the occurrence of a large number of lymphocytes and have arrived at the conclusion that their presence in large numbers in the cerebrospinal fluid is evidence of a tubercular inflammation of the meninges. Should this observation be confirmed by others whose opportunities for observation are much wider than mine, it will prove of great importance, since it will add another valuable test to our growing knowledge of the differential diagnosis of the various forms of meningitis.

ALBUMOSURIA AS A DIAGNOSTIC AID IN DISEASES OF THE OSSEOUS SYSTEM.

BY WALTER G. STERN, M. D., CLEVELAND.

The modern advances in the field of clinical research have placed such a high value upon urinalysis and the deductions from it, that no one will now dispute the statement, that any diagnosis, medical or surgical, is complete without a careful examination of the urine. We do not search after pathognomonic signs of any disease in urinalysis. No thinking man diagnosticates typhoid fever from a diazo-reaction, diabetes from the presence of sugar, intestinal obstruction for an increase in indican or nephritis from albuminuria alone. These findings merely bring a suspicion or a probability of the existing conditions; to be verified or excluded by the course of the disease or physical findings. In like manner late researches have shown albumosuria to be an early, frequent and often the only diagnostic sign of osteomalacia or of neoplasms arising from the medulla of the bones.

Albumoses are an intermediate product in the digestion of albumins, and had long been confounded with peptones from which they are at present distinguishable (1) by saturation with ammonium sulphate. They are not precipitated from acid solutions on boiling and if they have been thrown down at a lower

temperature are redissolved upon boiling the solution. When present in a slightly acidified urine, albumoses give a light flocculent ppt. at about 50-55 deg. C. which redissolves when the boiling point is reached; or, if they are thrown down in cold urine by nitric acid or the potassium ferrocyanide test, are rendered soluble by boiling. These are the reactions which first called Bence Jones' attention to this body and afford a ready and rough test for its determination. A more accurate yet simple test is the one given by Stewart (2). The urine, slightly acidified, is boiled, so as to get rid of the serum albumins, globulins, etc., the filtrate, which can only contain albumoses and peptones, is saturated with ammonium sulphate, a ppt. then shows albumoses to be present. Salkowski (3) has shown that urobilin may give a like reaction (even to the biuret test upon the final ppt.), so that the ppt. should be washed with alcohol to extract the urobilin, and then tested with the biuret reaction.

Albumones are found in the body as one of the normal constituents of bone marrow (4), where the percentage is increased in osteomalacia (5). On the other hand, Ellinger (6) was unable to extract it from the marrow of bone tumors, while he was able to demonstrate it in the blood.

The first to observe the presence of albumoses in the urine, was Bence Jones (7), who reported this condition in a case of osteomalacia in 1848. Whether or not this was an undoubted case, some authorities are in dispute. Virchow (8) later demonstrated the presence of albumoses in the bone marrow of a case of osteomalacia in increased amount. No further effort was made to study albumosuria or to associate its presence with bone disease. Kahler (9) first called attention to the relationship between multiple myelomata (multiple sarcoma of the bone marrow) and the presence of an albumosuria, holding that the latter finding was pathognomonic. That this was not strictly true was shown by his colleague Raschkes (10), who also found it in a case of senile osteomalacia. Other instances of its presence in osteomalacia are reported by Kuhne (11), Matthes (12), Huppert (13), and mentioned in the text books of Leube and Sahli.

A resume of the latest literature shows albumosuria to be a fairly constant symptom in, and often the only sign which was able to shed light upon a diagnosis of osteomalacia or multiple bone tumors. This is not to be confounded, however, with the febrile albumosuria which is transient, of small amounts and has been found (especially by the investigators of the Jena School)

in almost all the fevers, and in conditions where there is more or less disintegration of tissue and retention and absorption of pus. Then too, urobilin when present in considerable amount as in fevers, gives the same reactions, so that a great number of the Jena observations can be refuted upon this ground (14).

Of great interest are the clinical reports of cases of multiple bone tumors where the diagnosis was obscure. Wieland (15) mistook his case for one of miliary tuberculosis; he, as well as Seegelken (16), whose case was one of "a strange anaemia," first arrived at a diagnosis, after they became suspicious of multiple myelomata, on account of the presence of an albumosuria. Rustizky (17), Zahn (18), Rosin (19), Wright (20), Ewald (21), Bradshaw (22), Hammer (23), Matthes (24), and others report cases of multiple bone tumors in which albumosuria was a marked symptom. Senator (25) reports a case of bulbar palsy in which extreme anaemia and a considerable albumosuria were the only physical signs. The autopsy revealed the skeleton riddled with bone tumors. He concludes his report "when large amounts of albumoses are present in the urine, especially where there is a grave anaemia, there can be little doubt that multiple myelomata are to be diagnosed." Ellinger (26) records a case of tumors in the ribs, vertebrae, sternum and long bones which could not be diagnosed during life. But as there was present a considerable and persistent albumosuria he insists upon its importance as a diagnostic aid in obscure tumors of the bones. Fitz (27) in reporting a somewhat dubious case of leukaemia where albumosuria was a constant symptom, says, "transient albumosuria to be of no diagnostic value." He cites a case under the care of his colleague Shattuck, where the presence of a large amount of albumoses in the urine led to a probable diagnosis of multiple bone tumors, subsequent investigation with the Roentgen ray confirmed their suspicions.

Not all cases of osteomalacia and multiple bone tumors show this symptom, many because it was not looked for, but some because during the short time the patient was under observation albumoses were not present in the urine. In a case of multiple sarcoma of the skeleton presented to the Cuyahoga County Medical Society, by Dr. Quirk, February, 1901, albumoses were not demonstrated in the urine. Naunyn reports a similar case: "Further chemical research as to the nature of bone marrow and the diseases thereof are necessary to make this sign a pathognomonic one. Nevertheless in a large number of cases it gives the only

possible indication of the diagnosis. The extraordinary difficulties which a case of bone tumors may present are dispelled at once when a marked albumosuria is present" (29).

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ALBUMINURIA OF ADOLESCENCE AND CYCLIC ALBUMINURIA.

BY H. J. LEE, M. D., CLEVELAND.

The subject assigned me for a short paper implies that there are two distinct conditions. In all the essential points, however, they are one and may be discussed as one. The albuminuria of adolescence is always cyclic and cyclic albuminuria occurs most often in young people about the age of puberty, and the condition is no doubt the same as that which more rarely occurs later in life. Functional albuminuria is the term most commonly applied to this condition, because there is no demonstrable lesion present and the individual is apparently in good health. It is a most interesting form of albuminuria, and one that must not be passed by without careful consideration when it exists. The important point is the diagnosis and a diagnosis should not be "jumped at," for it is only by careful observation and examination that a correct diagnosis can be made. It will not do to conclude because a given specimen of urine has a small amount of albumin and no casts, that the case is one of functional albuminuria, because every one knows that in many cases of organic diseases of the kidneys the albumin will temporarily disappear, as will also the casts, only to reappear subsequently.

I shall not enter upon the discussion of the bearing this condition has upon life insurance further than to say that when the condition persists after twenty-five years of age the individual is probably never a good risk.

There has been much discussion about the etiology of this condition. Some have contended that the albumin of the blood must be different in composition in these cases and in consequence it transudes through the vessel-walls. In support of this theory is the fact that the condition is most commonly found in young people who are anaemic and who show evidences of general malnutrition, such as general pallor, flabby muscles and great nervous excitability, even hysteric in many cases. Others maintain that there must be some changes in the glomerular epithelium. And others still that it is due to certain diathetic states, particularly gout. The condition produces no systemic symptoms and is often recognized accidentally. Many cases are no doubt unrecognized. In the typical case albuminuria is absent in the morning urine but appears after taking food and after muscular exercise, and after cold bathing. The amount of albumin reaches the maximum in the latter part of the day and disappears entirely in the morning, and this cycle is run day after day with greater or less regularity. In exceptional cases albumin is always present, though in very much smaller amount in the morning which increases as the day goes on. As a rule the amount of albumin is small, not more than one-tenth by volume, but there are exceptional cases when the amount has been large.

The diagnosis of functional albuminuria can only be made after careful examination and long continued observation. The points upon which a diagnosis can be based are as follows: The amount of albumin must be small. Casts must be absent or present in very small numbers. There must be no retinal changes, no cardiac hypertrophy, no increased arterial tension and there must be no exaggeration of aortic second sound, nor dropsy in any part of the body. If, after repeated examinations extending over a considerable length of time, probably six months, these conditions exist it is probable that we have a case of so-called functional albuminuria.

The prognosis in this condition is always favorable. The great majority of the cases recover before the patient comes to adult life, exceptionally the condition persist until after twenty-five years of age, and in these cases there is great liability for the condition to pass with one of structural disease of the kidney.

The treatment of the condition is simple as far as the medicinal treatment is concerned. Anaemia if it exists must be treated the same as in other conditions. Iron in a form that is easily assimilated, together with small doses of arsenic and strychnia

have seemed to me in a limited experience with this condition to have a very beneficial influence.

The general management of the case is most important. The diet should be carefully regulated and at the same time be a nutritious one, one well adapted to the needs of a growing child. Milk is very appropriate and should be given freely. At the same time, it is not safe to exclude meat, but each case must be carefully watched and the amount of such foods regulated according to the condition of the urine and the general condition of the patient. Exercise and bathing and the general care of the skin must be carefully regulated by the physician. Young girls should be carefully watched during the menstrual periods and rest in bed at that time is advisable. A young woman should not marry until the urine has been normal for a year, as pregnancy may cause the condition to recur.

Abstracts and Extracts.

BY WM. CLARK, M. D.

THE TREATMENT OF GONORRHOEA WITH FREQUENT IRRIGATIONS OF HOT DECI-NORMAL SALT SOLUTION.

In looking over the germicides added to the water in the modern irrigation treatment and considering their strength, one is justified in being sceptical also as to the value of specifics used in this way, and in suggesting that plain water would do as well. The germ, though at first a resident of the upper layers of the mucous membrane, extends deeper and is entirely out of the reach of any germicide; and though these weak solutions might kill the germs on the surface, we do not need to kill them if we are to wash them out, and plain water will sweep them out just as well as a weak germicide. In my own experience with Halsted's method it did not seem to make any difference whether corrosive sublimate were added or not—the patients recovered as soon one way as the other.

Surely so weak a solution of permanganate can have little germicidal power for the short time it is in the urethra, and might just as well be omitted. In some of my own cases there was so much complaint of the pain that the drug was omitted; and the patients seemed to progress to recovery more rapidly on plain water. It is, then, justifiable to doubt the efficacy of any germicide in irrigation, and to assume that the good results are due to wash-

ing away the germs and toxins, leaving the tissues to destroy the rest.

The gonococcus is such a frail exotic, so difficult to keep alive in artificial media, that it was long believed to be a pure parasite, incapable of growth outside of the host. Almost anything can be expected to kill it—chilling, drying, etc.—and we know that the disease is rarely transmitted except by direct transfer from host to host, and that if it is transmitted by mediate transfer, it is done shortly after the germs have left the preceding host, the medium introducing the fresh, moist germs, as by moist towels, basins, etc. It is perhaps unknown for the dried, chilled germ to infect. The lower thermal death point is not known, but the germ will not grow if kept colder than 79 deg. F. Its range is said to be 86 deg. to 94 deg., and above 100.4 deg. it will not grow at all. Every degree beyond the growing limits must weaken the gonococcus, even if the effect is not fatal. Neisser demonstrates that 113 deg. F. destroyed the virulence and reproductive power of the germ, though we must presume that it must take some time to do this, for Sternberg shows that 140 deg. F. is fatal in ten minutes. Here, then, is a method of treatment better than germicides, for we can surely warm the deep gonococcus to a temperature of 113 deg. F. by copious irrigations. Perhaps Valentine's brilliant results are in part due to the heat of the fluids used, and surely the good results of baking gonorrhœal points in arthritis must be due to the germicidal power of the heat.

In gonorrhœa, then, it is a simple matter to cleanse with a fluid as hot and unirritating as possible, and as often as possible. Being at first only a local disease, only local treatment is needed. There are no nauseating drugs to damage the stomach, no annoying chemicals, no restrictions in diet except as to the articles we know to be irritating, nor confinement to bed, nor is there necessity for alkalinizing the urine, but only for diluting it when it is too concentrated. Instead of using a weakening and depressing treatment, we should build up the strength so that the powers of resistance are increased to the point where the tissues can dispose of the germs, which they eventually do in every case. Increased resistance from good nutrition is just as important as in other gonorrhœal infections. Reduction of diet is as bad as venesection.
—By *Charles E. Woodruff, M. D.*

* * *

Every physician knows that the intestines can be affected by calomel, salol, thymol, sulpho-carbolate of zinc and sodium, bis-

muth, turpentine, beta naphthol and a large number of other drugs. But that these drugs should be able to affect intestines which are the seat of typhoid ulceration seems strangely incredible to those physicians who are wedded to the older doctrines of therapeutics. Every physician knows, or should know, that acute enterocolitis in infants and children can be benefitted if not entirely cured by small broken doses of calomel, especially in connection with some of the other reliable intestinal antiseptics, and that the same drugs are equally valuable in the enteritis of adults; but that these drugs should be employed in typhoid fever to influence the condition of the intestines and the intestinal contents is a view to be met by the haughtiest skepticism! For my part, so long as I am engaged in the practice of medicine, I propose to be steadfast and loyal in the advocacy and use of this modern treatment. I shall do what little I can to popularize the antiseptic treatment of typhoid fever.

Starting from the positive observations that the intestinal antiseptics will cure enteritis in children and adults, it will be found that they also possess remarkable value in combating typhoid fever. Under their use the intestines can be practically sterilized and the contents rendered harmless for the organism. After the continuous employment of these antiseptics for several days absorption of poisonous substances from the bowels is greatly modified and in many instances wholly stopped. In this manner ptomian-intoxication is forestalled. The effect is shown by the disappearance of the symptoms of toxemia, and the stools lose their offensive character, and the formation of gases in the bowels cease.—*Chas. F. Hope, M. D.*

* * *

Does the form of the tubercle bacillus as found in the sputa, have any relation to the physiological condition of the patient? In the clinical classification of patients I made in the Adirondacks, I was impressed with the fact that the failing cases, with active destruction of lung tissue, produced sputa characterized by a preponderance of the shortest rod-like forms of bacilli. In cases that were doing well the short and jointed germs were few or wanting, the prevailing forms being slender, homogeneous rods of greater or less length, the substance often being broken into spore-like droplets. In old chronic cases, in which there had been a great loss of tissue, but in which the disease had been fairly-well arrested, or in which the malady had made such extensive havoc that the maintenance of life itself was a demonstration of the low

virulence of the infecting organism, the bacilli were long and beaded. A few observations were made to test the resistance exhibited by these different forms to decolorization by acids. This difficult subject was not sufficiently explored to support definite conclusions, but so far as the observations went it appeared that the short rods held their color longer under the action of acids than did the other forms.

To-day I am strengthened in the opinion, formed nearly eleven years ago, that the form of the tubercle bacillus, as it is demonstrated in the sputum, is an important indication of the virulence of the tuberculous process, and as a corollary I will venture to suggest that it is a useful guide to prognosis. It is a truism to say that the tubercle bacillus is always dangerous and may always be deadly. Most of those who were classed as "good" cases in my Adirondack list are long since under ground. As practical physicians we are familiar with the enormous influence of habits and environment upon the well-being of the tuberculous subject. Yet we are continually facing anew the strange fact that of two consumptives, both in similar physical condition, with apparently equal chances for recovery, one progressively gets well, but the other gradually slips backward, here a little, there a little, until no hope remains. Again, in the temporary physical backsets to which every tuberculous subject is liable, one case recovers perfectly as from a passing indisposition, but another rises broken and permanently hurt. It has seemed to me that the form of the bacilli found in the sputa has great significance in the discrimination of these classes of cases one from the other.

The short, deeply-staining rod or chain of rods of moderate length is the usual form in many active cases. The long rods, particularly if irregularly broken, betoken a milder process, and the chains of spore-like beads characterize the very chronic cases which make us wonder at their tenacious hold on life. If there be a *good* form of the tubercle bacillus it is, as seems to me, a rather long, slender rod, ill-staining or staining irregularly, as if the body of the microbe were irregularly corroded on the sides. It is found in cases apparently passing on to cure. Sputa of the same individuals examined month after month have seemed to me to vary in their bacillary characters with the state of the patient as regards the disease.—*Henry Sewall, Ph. D., M. D.*

* * *

After all, faith is the great lever of life. Without it man can do nothing; with it, even with a fragment, as a grain of mustard

seed, all things are possible to him. Faith in us, faith in our drugs and methods, is the great stock in trade of the profession. In one pan of the balance put the pharmacopœias of the world, all the editions from Dioscorides to the last issue of the United States Dispensatory; heap them on the scales as did Euripides his book in the celebrated contest in the "Frogs;" in the other put the simple faith with which from the days of the Pharaohs until now the children of men have swallowed the mixtures these works describe, and the bulky tomes will kick the beam. It is the *aurum potable*, the touchstone of success in medicine. As Galen says, confidence and hope do more good than physic—"he cures most in whom most are confident." That strange compound of charlatan and philosopher, Paracelsus, encouraged his patients "to have a good faith, a strong imagination, and they shall find the effects" (Burton). While we often overlook or are ignorant of our own faith cures, doctors are just a wee bit too sensitive about those performed outside our rank. They have never had, and cannot expect to have, a monopoly in this panacea, which is open to all, free as the sun, and which may make of every one in certain cases, as was the Lacedemon of Homer's day, "a good physician out of Nature's grace." Faith in the gods or in the saints cures one, faith in little pills another, hypnotic suggestion a third, faith in a plain, common doctor a fourth. In all ages the prayer of faith has healed the sick, and the mental attitude of the suppliant seems to be of more consequence than the powers to which the prayer is addressed. The cures in the temples of Æsculapius, the miracles of the saints, the remarkable cures of those noble men, the Jesuit missionaries, in this country, the modern miracles at Lourdes and at St. Anne de Beaupre in Quebec, and the wonder-workings of the so-called Christian Scientists, are often genuine and must be considered in discussing the foundations of therapeutics. We physicians use the same power every day. If a poor lass, parlayzed apparently, helpless, bed-ridden for years, comes to me, having worn out in mind, body and estate a devoted family, if she in a few weeks or less by faith in me, and faith alone, takes up her bed and walks, the saints of old could not have done more, St. Anne and many others can scarcely to-day do less. We enjoy, I say, no monopoly in the faith business. The faith with which we work, the faith, indeed, which is available to-day in everyday life, has its limitations. It will not raise the dead; it will not put in a new eye in place of a bad one (as it did to an Iroquois Indian boy for one of the Jesuit fathers), nor will it cure cancer or pneu-

monia or knit a bone, but in spite of these nineteenth century restrictions, such as we find it, faith is a most precious commodity, without which we should be very badly off.—*Prof. Wm. Osler.*

* * *

In many instances the diagnosis of perforation is comparatively easy, but many instances occur, such as I have related, in which there seems to be a reasonable probability of perforation. What are we to do in such cases? There seems to be two alternatives—on the one hand to await developments, until possibly the symptoms disappear and the condition is proved not to be a perforative lesion of the bowel, or until absolutely unequivocal signs of perforation and possibly of general peritoneal infection occur, when operative intervention will be too late—or, on the other hand, to operate immediately, even though there may be a reasonable doubt as to the perforation, and the intervention may turn out to be of a nature of an exploratory operation. I believe the latter course to be the proper one, and that the risk should be assumed, provided that skilled surgical assistance can be obtained. On future occasions I shall certainly lay more stress upon the presence or absence of rigidity of the abdominal walls in the diagnosis of perforation in typhoid fever, which is such a valuable sign in perforative appendicitis.—*Dr. Lafleur on Perforations in Typhoid.*

* * *

We physicians look down with contempt upon the laymen for the illogical reasoning and false deductions he indulges in the matter of diseases and their cure; we laugh at him for his comparison or non-comparable affections, and pity him for his false hopes and childish expectations. Because a mixture cured a cough due to a bronchitis he feels disappointed if it fails to do the same thing in a cough due to pulmonary tuberculosis. Because all innocent lipoma has been excised and has never returned, he is indignant at our inability to do the same thing with a malignant epithelioma; and so on. But are we not doing the same thing every day? Do we not jump at conclusions which are absolute *non-sequiturs* and which have no justifiability, either in theory or in fact? Do we not only too frequently mistake *post hoc* for *propter hoc*? Do not many of our hypotheses, when subjected to cool, sober analysis, appear like mere childish fancies? Because ergot will stop a hemorrhage from the uterus, we jump at the conclusion that it will do the same thing with a hemorrhage from the lung. But is there a rational basis for such a belief? Are the two

organs—their structure, their blood supply, and their nervous control—similar to one another? If a gravid or puerperal uterus contain a partly detached ovum or some debris following a miscarriage or natural labor, and we administer ergot, the ergot will have a most decided and unmistakable effect. It will initiate or strengthen uterine contractions and will cause the uterus to expel the foreign body. Would it, therefore, be reasonable to expect that a foreign body—let us say a cork—swallowed into the bronchus would be expelled by the administration of ergot? Absurd, you say? No more absurd—not much more, at any rate—than to expect ergot will stop hemorrhage from the lungs, just *because* it stops hemorrhage from the uterus. Here in the uterus we have a great number of bleeding vessels, imbedded in an enormous mass of hypertrophied muscular tissue. A special center in the lumbar region presides over that mass of muscular tissue. Stimulated by ergot, the center sends its command to the uterus—and the uterus contracts! And in this contraction there is the whole secret of uterine hemostasis, so far as ergot is concerned. As in a vise, the contracted muscular tissue keeps each bleeding vessel, until a little thrombus has been formed and its mouth has been effectually sealed up. It is not on account of any specific action of the ergot on the blood or on the blood-vessels; it is on account of its specific power to produce uterine contractions. It is superfluous to add that no such condition of affairs exists in the lungs; that the lung cannot be made to contract over its bleeding vessels. But has ergot no effect on the arterioles themselves? Yes, it has, but in the case of pulmonary hemorrhage the effect reacts injudiciously. Whether the ergot acts directly upon the walls of the arterioles or through the vaso-motor center in the medulla, is of no great consequence; the latter theory is the one which is most generally accepted at the present time. But whichever it may be, the fact is admitted that ergot increases the blood pressure; and increasing the blood pressure means driving the blood with greater force toward the open mouths of the ruptured vessels; it means greater resistance to the formation of a thrombus.—*William J. Robinson, M. D.*

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Editorial.

CAUSE AND EFFECT.

The practice of medicine is a business, and can be successfully pursued only through the recognition and adoption of business principles, which are broad in their scope, and more lasting in their effect, than exact methods of book-keeping or the collection of accounts.

No manufacturing or commercial enterprise could exist, were there not a demand for its products; and not the least part of the business acumen is to *create* as well as to *meet* a demand for its merchandise.

The very existence of a business concern lies in finding a market for its goods, and in placing them upon that market as good in quality and as cheap in price as its competitors can do. Any other policy would mean ruin, and especially if it were carried to the extent of diminishing the demand.

Here the business of the medical profession differs from that of the commercial world, as in its development and progress along scientific lines, the demand for the body as a whole is becoming less. This condition, we believe, can be met, in a measure, by exercising a closer scrutiny over the applicants for admission to our medical schools; by a diligent process of weeding out, during the course, so that the degree may be granted to none who are unfit by disposition or aptitude to be a credit to the profession; by raising the requirements of the state boards of examination, so that only those who show evidences of a thorough medical training be granted the certificate; and by adopting the standards set by the best schools only.

Many of the questionable practices which physicians as individuals regret to see, are, we believe, the outgrowth of conditions the profession as a whole is either indifferent to or else instrumental in encouraging. We have a system of ethics which is theoretically beyond criticism, but it is compelled, unfortunately, to meet very untheoretical conditions. It applies equally to countries which have one physician for every five hundred people, and to those whose proportion is one to a thousand or more individuals; alike to districts where a living may be reasonably made by honest and honorable means, and to those where overwhelming and discouraging competition presents an almost unsurmountable barrier to those who have no means or influence, and furthermore furnishes a constant source of temptation to stoop to unethical practices.

The world owes every hard working man a living, and no system of ethics can dominate the natural law of the survival of the fittest.

The profession is very properly restricted from pushing itself forward in an effort to attract attention in unethical ways, and it should, therefore, strive, so far as is possible, to remove the temptation for so doing. It cannot change the morals of its individuals, but it can and should make an effort to stop abuses, that operate to bring about conditions it must itself pay for, prominent among which are the free clinics, the cheap medical schools, the "Diploma Mills"—and it is a significant fact that

these "mills" have devoted themselves almost entirely to manufacturing the *medical diploma*—which fact we are prone to believe is as poor a compliment to the intelligence of the laity as it is to the indifference of the profession. If a large proportion of the former were not bigoted ignoramuses in regard to everything pertaining to medicine, the pseudo-doctor, the quack medicine man, the street-hawker and the medical fakir, would not reap such satisfactory incomes—far better in many instances than that of the regular practitioner.

The public must have what it wants—there is no truer business maxim—and this will ever be a fertile source of temptation to the unscrupulous. The more over-crowded the profession the greater the temptation, and the latter condition may be removed in a large measure remedying the former.

The question of medical commissions was recently discussed before the Cleveland Medical Society, with some difference of opinion regarding the prevalence of the custom, as well as the best means of suppressing it.

We believe that such practices should be distinctly condemned and discouraged by our medical societies. If their action does nothing further, it will indicate a sentiment against the practice, and the more timid of the scapegoats will either refrain from their custom, or what is more likely, resort to it on the quiet. *Under cover* indeed is usually the pass-word of these gentlemen, (pardon the word) in itself an admission that the practice is wrong. Man is a slave to heredity and environment. We can not change his hereditary meanness in this generation, but we can take steps to alter his medical environment, and in so doing act directly upon the cause of many evils, of which we see only the effect.

G. SEELEY SMITH.

COMMENCEMENT OF THE CLEVELAND COLLEGE OF PHYSICIANS AND SURGEONS.

Another college year was brought to a close on Wednesday, May 1, 1901. Members of the Alumni Association, Faculty and friends of the college assembled in the auditorium of the college building at 2 p. m. for their annual meeting. The addresses by Robert J. Lawlor, of the graduating class, Dr. George W. Crile and other members of the association were short, interesting and to the point.

The graduating exercises were held in the evening at the First Methodist church, which was beautifully decorated with bouquets and palms. The graduates, fifteen in number, presented a learned and dignified appearance in their caps and gowns. The address to the class was delivered by Rev. Morgan W. Wood, D. D. Dr. Wood spoke fluently and eloquently and gave them much excellent advice. He emphasized the fact that the lower walks in medicine, as in every other profession, are the most crowded, where you will find the narrow, jealous little fellows and the green-eyed monster in full sway, but in the higher walks there is plenty of room to breathe, plenty of room to grow and expand and not so much danger of getting your toes trampled upon. It was an inspiring and well-rounded talk.

The banquet at the Forest City House followed the exercises. There were many interesting and entertaining after-dinner speeches.

The following members of the class have received appointments or chosen their location:

Ernest E. Brown, M. D., has received an appointment as Assistant in Surgery, and Assistant Demonstrator of Anatomy in C. C. of P. & S. and will practice with Dr. N. Stone Scott, of 531 Prospect street.

Drs. H. S. Carr, W. A. Chapman and Albert I. Civins will practice in the State of Michigan.

Harry H. Drysdale, M. D., has received an appointment on the staff of the State Hospital at Massillon, O.

William C. Hayes, M. D., Willis T. Parsons, M. D., have received appointments on the house staff of Cleveland General Hospital.

Irving G. Hyer, M. D., will practice in Pennsylvania, his native State.

Monford R. Kellum, M. D., will take charge of an established practice at Independence, O.

Robert John Lawlor, M. D., has an appointment on the house staff at St. Alexis Hospital.

John E. Maska, M. D., has been appointed to the City Hospital.

George C. Radcliffe, M. D., has received an appointment as Lecturer and Demonstrator in C. C. P. & S.

Henry Alfred Young, M. D., has been chosen Physical Director in a boys' school at Washington, D. C.

In 1899 thirty-three per cent. of the graduates of that year received hospital appointments; in 1900, eleven out of a class of twenty-four received appointments in the various hospitals of the city.

This completes the first session in the new building, with its new equipment. The work of the year has been highly gratifying, both to the faculty and students. The faculty have been the recipients of resolutions from the different classes as evidence of their appreciation of the training they have received.

The contiguous course will be inaugurated at the opening of the school year, September 18, 1901. The prospects for the coming year are bright and hopeful.

G. D. O.

CHANGE OF DATE OF MEETING OF MISSISSIPPI VALLEY MEDICAL ASSOCIATION.

It is announced that the dates of the next meeting of the Mississippi Valley Medical Association have been changed from the 10th, 11th and 12th of September to the 12th, 13th and 14th of September. This change has been made necessary because the dates first selected conflicted with another large Association meeting at the same place.

The meeting is to be held at the Hotel Victory, Put-in-Bay Island, Lake Erie, O., and the low rate of one cent a mile for the round trip will be in effect for the meeting. Tickets will be on sale as late as September 12th, good returning without extension until September 15th. By depositing tickets with the Joint Agent at Cleveland and paying 50 cents the date can be extended until October 8th. This gives members an opportunity of visiting the Pan-American Exposition at Buffalo, to which very low rates by rail and water will be in effect from Cleveland.

Full information as to rates can be obtained by addressing the Secretary, Dr. Henry E. Tuley, No. 111 West Kentucky Street, Louisville, Ky. Members of the profession are cordially invited to attend this meeting.

Those desiring to read papers should notify the Secretary at an early date.

UNIFORM MEDICAL LEGISLATION.

The following article, written by Dr. Emil Amberg, appeared in a publication recently received. As it deals with a

question which should be of much interest to all of us we give it in full:

"Conditions which exist in regard to the license to practice medicine in the various political divisions of our country have thus far escaped the necessary attention on the part of the public. It must be taken for granted that very few people, outside of the medical profession, have an idea of the serious problem which must confront them in the near future. The fact that a physician who is allowed to practice medicine and surgery in one state or territory is regarded as unfit to treat people in another political division necessarily invites every intelligent citizen to investigate the reasons for such a state of affairs.

In any country the lives of all citizens should be valued equally high. This is not the case in the United States. Anyone who is familiar with the different medical laws in the various states and territories cannot conceal his grievance and indignation that conditions are allowed to exist which reflect upon the intelligence of many, and on the good will of some, in a way so strange to the American mind and so little in accord with the general interest in other public matters.

Many states absolutely refuse, within their jurisdiction, the license to practice to the same physicians whom citizens of other states legally authorize to exercise their professional duties, and to whom they intrust their own lives and those of their families. This fact can be explained only in two ways. Either the standing of those physicians is not sufficiently high for the former states or the former states intend to protect their "home industry." Although it must be admitted—and we cannot help being ashamed of this fact—that the last mentioned reason seems to prevail in a few instances, in the greater majority of cases the responsible parties in many states do not recognize the standard of the medical men who are accepted in others as sufficiently high. Special boards, created in most of the divisions, have the duty to exercise a controlling power over the physicians who intend to practice within their boundaries. Recognizing that the standard of a physician depends upon the general and medical education which he received, it is necessary for those who are responsible to the community for those whom they allow to practice to extend their control to the preliminary education of the student who intends to become a physician and to the medical education proper.

If all physicians would be equally well trained, no political division would be justified in refusing recognition to the physicians of another division. That all physicians should be equally well trained, so far as it is possible, cannot be disputed. In order to educate properly a student that he may become a good physician, we must have medical schools of a high standard, and only those.

It is admitted that we have too many medical schools and that we are in need of a greater number of good ones. It would be a wise step to close about three-fourths of the medical schools now existing, and to place the rest under rigid state control; or, what would be still better, to make them state institutions, as, for example, the University of Michigan Medical School, even admitting that some of the private schools are satisfactory.

Many of the medical schools now existing are the property of corporations for the benefit of a few. Special privileges have been granted to these combinations. This should never have been done.

That the existing conditions reflect upon the whole medical profession is easily understood, and it cannot be denied that the public in general should have more interest in a question which concerns every citizen.

So far as the physician is concerned, the overcrowding of the medical profession, especially with so many inefficient men, who have the same rights as others is one of the most serious questions. It is reported that there is one physician to less than 600 inhabitants in the United States; whereas the ratio in Great Britain is one to 1,100, and in Russia one to 8,500. There are in the United States, proportionately, six times as many practitioners as in Italy, about four times as many as in France and in Germany, and there are about 156 medical schools in our country to twenty medical schools in Germany. In aiming at "interstate reciprocity for the license to practice medicine and at uniform medical legislation" all points mentioned, besides others, must be considered.

The importance of the movement is recognized more and more every day by the medical profession, and the public will undoubtedly take a hand as soon as it understands the subject more thoroughly. The question is a comparatively simple one, and it can be dealt with more satisfactorily if the public at large interests itself in the same to a greater extent.

A great problem is before the people of the United States. Its solution should not be delayed."

THE HOSPITALS OF JAPAN.

The following very interesting letter by Dr. Edward C. Register, appeared in a recent issue of the *Charlotte Medical Journal*:

Japan has few hospitals, only ten. This is certainly a very small number when we consider that the country has a population of forty-five million and several large cities, one as large as Philadelphia, and three with five hundred thousand inhabitants each. It has a few cities with a hundred thousand people and no hospital at all. Tokyo, the capital of the nation, only has two, the Imperial University Hospital and the General Hospital.

The former is the larger and in many respects as good as any institution of the kind I have ever seen. It is as large as all the other hospitals of Japan put together. It is almost entirely maintained by the government. It has eighty resident physicians and six hundred trained nurses. The average number of patients treated there is twenty-two hundred, and in the various out-door departments many thousand sick people are treated annually. The main building makes no pretensions to architectural beauty; it is a perfectly plain two-story brick and stone structure, one hundred feet wide and four hundred feet long. It is located in the middle of a beautiful park, with its lawns, green terraces, tropical trees and plants, playing fountains and here and there, artistically arranged and various shaped, are comfortable looking rests or seats, some in the sun, others in the shade, many grouped around fountains, while some are scattered along little rippling streams. Here landscape gardening has reached the highest state of development.

This building is only used for offices, reception rooms, parlors, library, museum, billiard rooms, drug rooms, and the microscopical department. This microscopical laboratory is the largest and most complete I have ever seen. Here I had the pleasure of meeting the celebrated Dr. Kitasato who was sent, several years ago, to China and India by the Japanese government to investigate the Bubonic Plague, and who successfully isolated the bacillus of this disease. He is evidently a very scientific man and an accomplished physician.

With the exception of the operating rooms, all the other buildings connected with this institution are one story high, made of wood, and join the rear of the large stone building leading off from it at right angles and parallel with each other. They are four

in number and extend back possibly five hundred feet. About every hundred feet they are connected with each other by covered bridges with glass sides. On both sides of all the wooden buildings, there is a narrow veranda which is usually closed by sliding glass doors. All the wooden buildings are painted white, inside as well as outside.

The physicians and nurses wear white uniforms, European style. With all this perfectly clean and glittering glass, surrounded by so many flowers and shades, with the sun's rays peeping in here and there, it certainly looks beautiful and healthy.

Connected with these buildings, there is one for the physicians, one for the nurses, and one for the servants, a department for lying-in patients, one for contagious diseases, and one for the insane. The architecture of them all is uniform, the distance between them, and the way they are connected, are all identically alike. Several other buildings, used for minor purposes, and scattered about over the park, making a perfect network of houses, all conveniently arranged and magnificently kept.

The surgical department is a large two-story stone structure, plain, but rather handsome. It stands off to itself. It is a comparatively new building, has only been finished about a year. It has several operating rooms and amphitheaters, and can take care of about two hundred surgical cases at a time. Minor cases are usually cared for in the main hospital building.

Surgeons in this country are very conservative, a great deal more so than in America. Patients are slow to consent to be operated on. They have to know that it is their last chance before they will consent. This is not because they are cowards or not as brave as other people are. It is because they have acquired, and to some extent inherited, a prejudice against surgery. This is not peculiar to the Japanese, it is characteristic of all oriental semi-civilized people where Buddhism exists. Some of its former teachings prejudiced the people against surgical operations. To cause bloodshed except when favored by their god of war was a great wrong. There was no exception to this rule, even in their relations to the lower animals. To a great extent this prejudice is gradually being overcome.

This makes the surgical work of this great hospital rather small when compared with its other departments. It has septic as well as aseptic operating rooms. In the former, they pay very little attention to cleanliness, but in the aseptic operating rooms every thing glitters and is in perfect order and is, no doubt,

thorough aseptic. In and around these operating rooms you can see large and beautifully arranged instrument cabinets filled with every apparatus and appliance known in connection with modern surgery. The most of them are made in Japan, but they import some of them from Germany, England, and a few from America. The wards were overcrowded, and the rooms for single patients are very small, not over ten feet square, and, strange to say, in an institution so modern and so well equipped in so many respects, would furnish their first class rooms, just as they are in a hotel, with velvet carpets, rugs, curtains, cloth covered sofas and chairs.

The crowding of their wards to overflowing seemed to me cruel, yet the patients looked comfortable, and many of them happy. Both sexes were often in the same ward, being bathed and dressed at the same time, without any embarrassment to any one.

It has been said that nudeness can be seen in Japan more than any other place in the world, but it is never looked at. The correctness of this was impressed upon me when going through the wards of this hospital.

While the surgeons in this country are very conservative, they are not timid. Many of them do excellent work. I spent a day in this Imperial University Hospital, saw several operations, and I observed nothing that was not intelligently and skillfully done. One young assistant surgeon, who could speak a little English, told me that he had used the Murphy button seventeen times without a single failure, and that the chief surgeon had performed seven laparotomies for perforation in typhoid fever and had saved three cases.

I was astonished to see so many cases of tuberculosis in this hospital. Forty per cent. of the inmates had tuberculosis. Going back over the records for five years shows that thirty-five per cent. of all cases admitted were tuberculous. This great susceptibility to tuberculosis, on the part of the Japanese, was something new to me. Statistics show that thirty-two per cent. of all deaths in Japan is due to tuberculosis. In America it is less than fifteen per cent. and we are justly alarmed.

Rheumatism was the next most prevalent disease I found in this hospital, and skin diseases were very rare.

It is easy to observe the causes of consumption in this country. Leaving out all hereditary tendencies, the habits and customs of the people would naturally cause it to develop. Their

houses are always built on the ground, uniformly one-story high, few windows and they are like pigeon holes. They have few facilities for heating their houses. Even in the coldest weather they will do without fire, consequently their homes are cold, damp and dark, just the conditions and surroundings to favor the development of tuberculosis. Besides a Japanese seldom has anything on his floor. Sometimes among the better classes they will use a straw matting, something like we use in the summer. They always take off their sandals or wooden shoes at the door and wear nothing on their feet while in the house, no matter how cold and damp it is. With these conditions and methods of living it is not surprising that consumption and rheumatism are so prevalent.

The absence of skin diseases among the Japanese is evidently due to their cleanliness. I suppose they bathe more than any other people in the world. There are over eleven hundred public baths in Tokyo alone, and it is estimated that four hundred thousand people patronize these baths daily. They use the water a great deal hotter than we do in America, seldom under 110 deg. Fah. and often 118 or 120 deg. Fah., and remain in the bath for hours, especially in the winter, as it is a cheap way to keep warm. It costs them one sen for each bath, about a half cent in American money.

I noticed in the Imperial University Hospital that they were giving creosote in pulmonary tuberculosis, in seventy-five drop doses, three times a day, injecting serums made in Germany, and experimenting with some made by themselves. They were using inhalers and sprays just as we do, and I suppose with about the same success.

The General Hospital at Tokyo is quite a nice institution. It is partly under the control of the Red Cross Society of Japan. It has twenty resident physicians and two hundred trained nurses. Its average attendance is seven hundred, besides thousands of sick people are treated in its various outdoor departments. The buildings are old and the grounds have an appearance of dampness and neglect, a lack of brightness that does not very favorably impress a visitor. The general arrangements of the buildings are on the cottage plan, with one very large brick building which is used for the officials of the hospital. The operating rooms are fairly well arranged and equipped. They will compare very favorably with some of our large hospitals.

The Yokohama Hospital is small and badly arranged, and evidently poorly managed. It is attended by a staff of three physicians, who live in the city. The building is old, damp and dark, surrounded by no gardens or yard.

Kioto, the old capital of Japan, a city of six hundred thousand population, only has one good hospital. This is the Kioto Hospital Medical School. It is a hospital and medical college combined. They are under one management and the buildings are connected. The grounds cover ten acres and are beautiful. The buildings cover about three acres and all but one of them are made of wood, and are two stories high. The main building is three stories high, built of stone, and it is new and a handsome structure. Twenty-eight physicians are connected with this school and hospital. Twenty-one students were graduated last March. All the physicians live in little cottages on the hospital grounds, and the students room in the main building. Three physicians from Germany and one from Holland teach in the medical department. It is partly supported by the city government.

About five years ago all of its buildings were destroyed by fire and they have only in the last year finished rebuilding them, consequently everything is new and up to date. They have two operating rooms not connected with amphitheater halls. I have never seen anywhere two operating rooms more conveniently arranged or more thoroughly equipped. Here pharmacy is taught as well as medicine.

Several years ago the medical school was divided into a medical school proper and a preparatory medical school. When a student begins with the preparatory studies it takes him twelve years to graduate. This hospital has the most complete hydrotherapeutic establishment of any in Japan. It occupies the basement of the main building and is thoroughly modern in every respect. It comprises a Turkish bath, vapor bath, Charcot's douche, electric baths, sulphur baths, iron baths, and a suite of hot and cold baths with sprays. Annexed to this department is a completely fitted medical gymnasium.

The Doshesha Hospital at Kioto is kept up by a Canadian mission. It has no resident physician and only one trained nurse, who is from New York. Three physicians attend the hospital, each a week at a time, in rotation. They have six or eight beds fixed up especially for foreigners, and many Europeans and Americans have been cared for there.

Nagoya, a city of two hundred thousand population, has only one small hospital. It is a private institution, run by three rather bright, enterprising young Japanese physicians. The buildings were not originally constructed for the purpose for which they are now used. The grounds are small, no lawns, and few shades. The surroundings had a dilapidated, neglected look, and the inside was dark, damp and had a mouldy smell. Their little operating room looked neat, but was poorly furnished. They had sixteen patients, but none of them were surgical cases.

Osaka has a city hospital. I did not have an opportunity to visit it.

Kobe and Nagasaki each has a hospital. The one at Kobe interested me greatly. Its buildings are very large and it is evidently well patronized. They have eighty trained nurses, and an average of two hundred and fifty patients. Its reception rooms for out-door patients were crowded to overflowing. The general operating room for third-class patients, interested me more than anything surgical I have seen in Japan. Here seven operations in one room were being performed at one time. It reminded me of Barnum's circus, it had so many attractions going on at one time. It had no preparatory ante-room for undressing or dressing. The anesthetic was administered and, in fact, everything connected with each case was done in this one room. Female as well as male patients were admitted and treated or operated on as their time came. I noticed one surgeon was operating for urethral stricture in the male, another setting a broken arm for a little boy, while another was doing gynecological work. Only seven physicians remain in the hospital at night, all the others live in different parts of the city. I could not learn how many were connected with it or how they were appointed.

The Red Cross Society has recently established a hospital in Kobe. The day I visited it, it only had three patients, one nurse, and no resident physician. I did not see the hospital at Nagasaki. I understand it is used partly for the Japanese navy. America, England and Germany all have naval hospitals at Yokohama.

I suppose it might be said that there are a great many other hospitals in Japan that I have not mentioned. There are many little mission hospitals where they are doing dispensary work, and often they have a few beds where they take care of three or four patients at a time. A great many physicians have their own little private hospitals. I visited several of them. They are so

small, have so few facilities, and are so poorly patronized, that they are not recognized by the local city directories. The Japanese army has several hospitals. I did not, of course, visit them.

The Imperial Hospital at Tokyo, that I described at first, seems to be the medical centre of Japan. Nearly all the best people, throughout the country, when they have to submit to any important surgical operation, or have any serious complicated disease, go there. The distance from any part of Japan to Tokyo is short, the railroad facilities are good and the fare is less than a cent a mile. This makes the surgeons, physicians and specialists there very accessible, and they are patronized more than they are in any other part of the country.

The Japanese physician is peculiarly fitted for certain departments of medicine. It is characteristic of the best element of the race to be industrious, deliberate, careful, and he loves more than anything else to work for days, weeks, and even months, at a single little thing. Mr. East certainly *knew* the people well when he tersely said that they seemed to be "great in small things and small in great things." I notice that they are enthusiastic workers in microscopy, their patience seems never to tire; they will prepare slide after slide, specimen after specimen, and their interest never sags. This kind of work suits them.

In surgery, the smaller and more delicate and difficult the operation is, the more it interests them. The average Japanese physician would rather see a cataract operation than a hysterectomy. To watch them prepare for an operation, the time they seemingly throw away arranging little things, the minute instructions they give their assistants and nurses, even in minor surgical cases, and to observe them fix, with so much care and deliberation, every table and tray, every knife and sponge, perfectly oblivious to time, is as amusing as it is tiresome to the hustling, restless, and impatient American.

Nagasaki, Japan, Oct. 23, 1900."

CLEVELAND MEDICAL LIBRARY.

The following new books have been purchased and placed on the shelves for reference:

Cabot, Richard C.—The Serum Diagnosis of Disease, 1899.

Cheyne & Burghard.—Manual of Surgical Treatment, Vol.

4, 1901.

Bishop, Seth Scott.—Diseases of the Ear, Nose and Throat, and Their Accessory Cavities, 1899.

Blaikie, William.—How to Get Strong and How to Stay So, 1898.

Zeitschrift fur Klinische Medecin, Vol. 32 to 42, to date.
(This completes the file of this journal).

Additional Journals subscribed for and to be found in reading room:

American Medicine.

Zeitschrift fur Klinische Medecin.

Donated:

By Dr. C. J. Aldrich.—Salinger-Kalteyer; Modern Medicine, 1900.

By Dr. G. W. Moorehouse.—72 volumes miscellaneous medical works.

By Dr. H. G. Sherman.—76 volumes miscellaneous medical works.

By Dr. L. B. Tuckerman.—The Use of the Rontgen Rays. By the Medical Department of the U. S. Army, etc., by W. C. Borden, etc., 1898.

From Secretaries and others.—Transactions of the Mississippi Valley Medical Association, 1900. Proceedings of the Pathological Society of Philadelphia, 1901. Transactions of the Ohio Medical Society, 1898, 1899. Transactions of the Wisconsin Medical Society, 1890, 1895, 1896, 1899. Cleveland General Hospital Bulletin, 1900. Public Health Reports, 1901; weekly. Report of New York Hospital, 1900.

By Dr. J. H. Lowman.—A large oil painting of Dr. C. G. E. Weber, by Mr. F. S. Simmons.

New Books.

WAINWRIGHT'S URINARY DIAGNOSIS.—URINARY DIAGNOSIS AND TREATMENT. By J. W. Wainwright, M. D., Member of the American Medical Association, New York State Medical Association, New York County Medical Association, etc. Illustrated with numerous engravings and colored plates. Pages, 140. Price \$1.00 net.

This book gives not only all the usual methods of urinary examination, but introduces also a new feature in works of this character, viz., a discussion of the clinical significance of the urinary findings and their practical application in treating the diseases of which they are symptomatic.

Among the subjects discussed are the following: Composition and Physical Character of the Urine; Normal Constituents of Urine; Abnormal Constituents; the Microscope and Microscopical Technique; Qualitative Analysis of Urinary Calculi; Bright's Disease, Diabetes; Gout and Other Conditions and Their Treatment; Favorite Prescriptions, etc.

A TEXT BOOK ON PRACTICAL OBSTETRICS. By Egbert H. Grandin, M. D., Gynæcologist to the Columbus Hospital; Consulting Gynæcologist to the French Hospital; Late Consulting Obstetric and Obstetric Surgeon of the New York Maternity Hospital; Late Obstetrician of the New York Infant Asylum; Fellow of the American Gynæcological Society, of the New York Academy of Medicine, of the New York Obstetrical Society, etc.; with the Collaboration of George W. Jarman, M. D., Gynæcologist to the Cancer Hospital; Instructor in Gynæcology in the Medical Department of the Columbia University; Late Obstetric Surgeon of the New York Maternity Hospital; Fellow of the American Gynæcological Society of the New York Academy of Medicine, of the New York Obstetrical Society, etc. Third edition, revised and enlarged. Illustrated with 52 full-page photographic plates and 105 illustrations in the text. 6½x9½ inches. Pages xiv-511. Extra cloth, \$4.00, net; sheep \$4.75, net. F. A. Davis Co., publishers, 1914-16 Cherry Street, Philadelphia.

The third edition of this work has been improved materially by the addition of elementary subjects, the lack of which made the first editions inadequate for a student's text book. References from one portion of the book to the other cumber it, and date back to the time when it was published in two installments. Cuts which teach nothing excepting the personal appearance of the attendants, occupy space which might better be devoted to an elucidation of methods other than the author's.

As a work of reference for experienced operators it is excellent.

R. E. SKEEL.

DISEASES OF THE HEART; THEIR DIAGNOSIS AND TREATMENT. By Albert Abrams, A. M., M. D., (Heidelberg), F. R. M. S.; Consulting Physician for Diseases of the Chest, Mt. Zion Hospital, and the French Hospital, San Francisco. Illustrated. Price \$1.00. G. P. Engelhard & Co., Chicago. 1900.

In this book the author discusses the subject of diseases of the heart entirely from a practical standpoint. The work does not aspire to the dignity of a treatise on diseases of the heart, but instead gives the most practical and latest methods of treatment in detail. It will prove a valuable addition to medical literature.

PULMONARY CONSUMPTION, PNEUMONIA, AND ALLIED DISEASES OF THE LUNGS; THEIR ETIOLOGY, PATHOLOGY AND TREATMENT; WITH A CHAPTER ON PHYSICAL DIAGNOSIS. By Thomas J. Mays, A. M., M. D., Professor of Diseases of the Chest in the Philadelphia Polyclinic; Visiting Physician to Rush Hospital for Consumption. Illustrated. Price \$3.00 net. E. B. Treat & Co., 241-243 West Twenty-Third Street, New York; 1901.

This is an exhaustive treatise upon diseases of the lungs and contains much that is new, especially in the etiology of pulmonary consumption, and pneumonia.

"The fundamental concepts of the work may be formulated into the following propositions:

"1. That pulmonary phthisis in the large majority of cases is primarily a neurosis, and that the pulmonary disintegration is secondary.

"2. That any agent, influence, or condition which undermines the integrity of the nervous system will engender pulmonary phthisis, or some other form of pulmonary disorder.

"3. That the only remedies of value in the treatment of pulmonary phthisis are those which appeal to and act through the nervous system.

"4. That of special value in the treatment of phthisis is the counter-irritant action of silver nitrate introduced hypodermically over the vagi in the neck, and

"5. That acute pneumonia, and other forms of acute pulmonary disease, are closely affiliated with disorder of the nervous system."

PROGRESSIVE MEDICINE. A QUARTERLY DIGEST OF ADVANCES, DISCOVERIES AND IMPROVEMENTS IN THE MEDICAL AND SURGICAL SCIENCES. Edited by Hobar Amory Hare, M. D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia; Physician to the Jefferson Medical College Hospital; Laureate of Royal Academy of Medicine in Belgium, of the Medical Society of London; Corresponding Fellow of the Sociedad Espanola de Higiene of Madrid; Member of the Association of American Physicians, etc. Assisted by H. R. M. Landis, M. D., Assistant Physician to the Out-Patient Medical Department of the Jefferson Medical College Hospital. Volume I. March, 1901. Surgery of the Head, Neck and Chest—Infectious Diseases, Including Acute Rheumatism, Croupous Pneumonia and Influenza—Diseases of Children, Pathology, Laryngology and Rhinology, Otology. Lea Brothers & Co., Philadelphia and New York. 1901.

The contents of this volume are: Surgery of the Head, Neck and Chest, by J. Chalmers Da Costa, M. D.; Infectious

Diseases, including Acute Rheumatism, Croupous Pneumonia and Influenza, by Frederick A. Packard, M. D.; The Diseases of Children, by Floyd M. Crandall, M. D.; Pathology, by Ludwig Hektoen, M. D.; Laryngology and Rhinology, by A. Logan Turner, M. D. (Edin), F. R. C. S. Edin.; Otology, by Robert L. Randolph, M. D.

As the title indicates, this work deals with the advances made in the various branches of our profession, and we feel sure that every physician will be benefited by using such a volume to keep abreast of the times. Volume II. will be issued in a short time. The binding and press work are neatly done and the volumes will make an agreeable addition to any library.

OBSTETRIC AND GYNÆCOLOGIC NURSING. By Edward P. Davis, A. M., M. D.; Prof. Obstetrics in the Jefferson Medical College, Philadelphia, and in the Philadelphia Polyclinic; Obstetrician to the Jefferson and Polyclinic Hospitals; Obstetrician and Gynæcologist to the Philadelphia Hospital. Illustrated. Philadelphia and London. W. B. Saunders & Co. 1901.

This is a thoroughly practical and instructive work and is admirably adapted to the purpose for which it is intended. It treats upon all branches of obstetric and gynecologic nursing, and will prove of value to the physician as well as the nurse.

THE INTERNATIONAL MEDICAL ANNUAL: A YEAR BOOK OF TREATMENT AND PRACTITIONER'S INDEX. Contributors: Robt. Abbe, A. B., M. D.; Herbert W. Allingham, F. R. C. S.; Prof. Edward A. Ayres, A. M., M. D.; Jas. Cantlie, M. A., M. B., F. R. C. S.; Prof. A. H. Carter, M. D., F. R. C. P.; Prof. Harry D. Chapin, M. A., M. D.; F. Richardson Cross, M. B., F. R. C. S.; F. W. Edridge-Green, M. D.; E. Hurry Fenwick, F. R. C. S.; T. Colcott Fox, B. A., F. R. C. P.; H. Bellamy Gardner, M. R. C. S., L. R. C. P.; A. E. Giles, B. Sc., M. D., F. R. C. S.; Edward W. Goodall, M. D.; J. Dundas Grant, M. A., M. D.; Prof. G. M. Hammond, A. M., M. D.; Robt. Jones, F. R. C. S.; Priestley Leech, M. D., F. R. C. S.; Prof. Henry P. Loomis, M. D.; Prof. Joseph McFarland, M. D.; John MacIntyre, M. B., C. M.; Chas. F. Marshall, M. D., F. R. C. S.; Wm. Milligan, M. D.; Keith W. Monsarrat, F. R. C. S.; Wm. Murrell, M. D., F. R. C. P.; Jos. Priestley, B. A., M. D., D. P. H.; Boardman Reed, M. D.; Prof. C. Ruata; Prof. Robt. Saundby, M. D., F. R. C. P.; W. Scott Schley, A. B., M. D.; James Shaw, M. D.; Walter G. Spencer, F. R. C. S.; A. H. Tubby, M. S., M. B.; Joseph G. Turner, F. R. C. S., L. D. S.; J. W. Thompson Walker, M. B., F. R. C. S. 1901. Nineteenth year. E. B. Treat & Co., 241-243 West Twenty-Third Street, New York; 199 Clark Street, Chicago. Price \$3.00

It is impossible with the space at our command to give a worthy review of this work. It is devoted to a review of new

treatment and remedies, both in medicine and surgery, and nothing is to be found between its covers that is not of distinct value. It is a most valuable book of reference.

Society Proceedings.

May L. Bassett, Medical Reporter.

CUYAHOGA COUNTY MEDICAL SOCIETY.

Annual Meeting, April 4, 1901.

The meeting of the Cuyahoga County Medical Society was held in the Library Building on Thursday evening, April 4, 1901. The President, Dr. Aldrich, occupied the chair, and the minutes of the last meeting were read and approved. Reports, both quarterly and annual, were given by the Treasurer and a committee consisting of Drs. Lenker and Large was appointed to audit the Treasurer's books. The committee reported favorably and the Treasurer's report was received. The name of Dr. S. F. Calhoun, was announced for active membership, and on motion the Secretary was instructed to cast the ballot of the society for Dr. Calhoun.

A case of spina bifida operated on the fourth day; recovery. Presented by Dr. L. B. Tuckerman.

This case which I present to-night was delivered December 17th, 1898, by Dr. Wooldridge. The position of the child was normal, and the labor, though tedious, was accomplished without the use of forceps. Over the lower lumbar region of the spine there was a sessile tumor, globular in form, about two and one-half inches in its greatest diameter and about three-fourths of an inch in diameter at its point of attachment. Its upper surface was bare of epithelium over an irregular elliptical area one and three-fourths by one and one-fourth inches, the central portion of which was thin and membranous, as is clearly shown by the specimen. The child was three days old when I saw it, and the bare surface of the tumor was beginning to show signs of supuration with an apparent probability of perforation at the thinnest point. Early operation was advised, and the next day Dr. Wooldridge anaesthetized the patient with the Latta mixture (chloroform, two fluid ounces; amyl nitrite, 5 drops) holding him with the buttocks up and head down, the line of the body being about 45 degrees from the perpendicular. An incision was made about the base of the tumor about three-fourths of an inch above its

point of attachment, and the dissection was carried downward and inward toward the opening in the spinal canal. When this was reached the tumor was freely opened and the end of the spinal dura was found coming through the opening in the bony canal and attached to the lining membrane of the tumor about half an inch from the upper border of the opening. There were no nerve filaments free within the tumor. The spinal dura was detached, and ligated with catgut to control a somewhat free hemorrhage. The base of the tumor was then excised, care being taken to leave enough of the lining membrane of the tumor to cover in the spinal opening without tension on the stitches. The end of the cord was replaced in the canal, and the canal was closed and the broad surfaces left by the dissection brought together with a continuous buried suture of catgut. This was reinforced by three or four interrupted sutures of silkworm gut inserted deeply through the tissues, which sutures served also to bring the skin surfaces into close apposition. When the dressings were removed ten days after the operation healing was found complete except at one point where there was a small granulating surface, which was soon covered by epithelium. As you see, the child walks well, and appears in good health. There is a slight elevation where the tumor was, and there is still some tenderness on pressure at that point. He developed *ophthalmia neonatorum* a few days after birth, which responded well to treatment, but at no time has he manifested any symptoms referable to the spinal lesion. It was fortunate for the patient that there was so little involvement of the nervous tissue of the cord, otherwise I might not have been able to report a recovery. It is perhaps worthy of mention in connection with this case that an aunt, a sister of the mother, has cleft palate.

There are only two points which I wish to emphasize in the case, and they are, first, the earlier you operate, the more likely you are to have recovery; second, Dr. Wooldridge anesthetized the patient head downward so that almost no cerebro-spinal fluid was lost except what was in the tumor itself. The opening being at the top of the column the fluid remained in the cord and the ventricles of the brain, and there were none of the nervous symptoms which we read about in cases where there has been considerable draining of the spinal fluid during or subsequent to the operation.

Dr. Bunts: I wish especially to congratulate the doctor on the results obtained. I would like to ask him to give a more

minute description of the relation of the cauda equina to the sac, and as to whether any nervous phenomena developed.

Dr. Tuckerman: The end of the sac of the dura mater came down and was attached to the point where the pin is to be seen in the specimen. I found no nerves loose in the sac. I did not pull very hard on what appeared to be the end of the dura mater in order to find out of what it consisted. I made a broad base of one-half inch or over, making a cut in a wedge-shape, and brought those surfaces together, face to face, by a catgut suture and then besides used silkworm gut retaining sutures, and there was no appreciable leakage from the cut. I was somewhat afraid of sepsis but we did not get it. The child manifested no nervous symptoms and soon appeared perfectly healthy, just as you see it to-night.

Dr. Hamann: The result in this case is remarkable, and the doctor is to be congratulated. I should like to ask what method was adopted to prevent infection and what the surface of the tumor was like, and where the nerve filaments were attached. Of course the position of the tumor was favorable as it was below the end of the cord. Usually nerve filaments are attached to the area medullo-vasculosa, which is a depression on the summit of the tumor. I have operated upon but one case of spina bifida and unfortunately the result was not favorable, as infection occurred through inability to prevent leakage, as you know that is the most difficult thing to prevent in this operation.

Dr. Tuckerman: Naturally great pains were taken to disinfect thoroughly before operating, but if you will look at the scar you will see the extensive surface cut, dissecting out nearly an inch and cutting down and leaving a broad surface on each side, and then these surfaces were coapted firmly, so that they were in close contact throughout their whole extent, and then the addition of the silkworm gut sutures gave still further support, sufficient, in fact, to resist the pressure of the fluid in the spinal canal.

Dr. Hamann: Did you seal the wound with collodion?

Dr. Tuckerman: Used a wet bichloride dressing only. That was all, and there was no leakage.

Dr. Hamann presented a case on whom he had operated for persistent neuralgia of fifth nerve.

Dr. Hamann: This patient was operated upon in 1893 by Dr. Allen, who took out the infraorbital nerve. This brought relief for two years. The patient presented himself again last September for intense pain in the area supplied by the second divis-

ion of the fifth. The case was a typical one of epileptiform neuralgia. I decided to perform an intracranial neurectomy. An osteoplastic resection of the skull was made, as in the Hartley-Krause method. The chief difficulty encountered was hemorrhage from the middle meningeal artery.

As the first branch was not involved I did not divide it, for there is considerable danger of injuring some of the nerves of the orbit. I did not attempt to remove the Gasserian ganglion. The superior and inferior maxillary nerves were divided and their ends pushed as far as possible into the foramina of exit. On the tenth day the flap had ceased to pulsate. There was no pain after the operation, and the patient has gained steadily in weight. At the present time sensation is apparently equal upon both sides of the face. Of course regeneration must have taken place.

Dr. Bunts: I have been very much interested in this case, especially in Dr. Hamann's description of the operation. Realizing the difficulty of removing the Gasserian ganglion by this method, over a year ago I attempted to remove it by a modification of the method suggested by Cushing. Instead of the osteoplastic operation, the flap is cut down through the zygoma and a hole is chiselled through the cranial wall, giving a little more access to the cranial cavity. Dr. Cushing says it is quite easy to split the two layers of the dura mater, and if this is done there is practically no hemorrhage until subsequent cutting, by this method leaving the lower layer of the dura mater till the last when the hemorrhage is easily controlled. One advantage of this operation is that it gives a full view of the meningeal artery so that it is not necessary to ligate it. I did not have any difficulty in exposing the Gasserian ganglion, but I did have difficulty in separating the layers of the dura mater. I have attempted this operation five times upon the cadaver, and yet have been unable satisfactorily to remove the ganglion. One reason for this is that in the cadaver the nerves are soft so that it is almost impossible to hold them or trace them up. In this operation which Cushing suggested it is comparatively easy to hook up the nerves and divide them. I clamped just back of the foramina and then attempted to separate what I supposed was the ganglion and sent it down to Dr. Howard for examination. He was unable to find any ganglion cells in it. The patient is now well, about one year from date of operation. I had to prevent hemorrhage for several days by packing. There was temporary trouble with the muscles of the eyelids but that difficulty disappeared before he left the hos-

pital, and he was able to get his lids nearly closed. I have not seen him for some time, but think he is all right, as a letter received recently states that he has had no further trouble. I believe that an intracranial neurectomy promises results quite comparable with removal of the Gasserian ganglion.

Dr. Large: What effect does this operation have upon the nerves of the ear?

Dr. Hamann: In answer to Dr. Large's question, I will say that there was no change produced in the hearing by this operation. The peripheral operations are done first, as in this case. If the pain returns, the intracranial operations are then done. I have found difficulty in clearing the dura mater from the ganglion in the cadaver.

Dr. Aldrich: As throwing a little more light upon the question of operation, Dr. Stuart has just recalled the fact that his pain recurred in six months. Now it is practically the experience of others that fully 75 per cent. of the cases recur after neurectomies. And indeed, many of the best men of the profession believe that it is an unsatisfactory operation to try to remove the Gasserian ganglion for relief of these cases. But I cannot see why the intracranial neurectomy is any better than removal of the nerve. It may be that manipulation of the nerve where attempts have been made, is the cause of a change of nutrition, as operations upon the brain sometimes benefit the brain, and that the relief is not due to the division of the nerve only. It would be interesting to know if any case has been operated upon without division of the nerve. In this case we may have a regeneration of the nerve by this time without return of pain—though six months is a pretty short time in which to expect regeneration of the nerve, I think. And if this case goes a long time without return of the pain, it will give a fair comparison of the relative values of the two operations.

Dr. Bunts: I can say this much in regard to manipulation: In a case which Dr. Lower operated upon to remove the Gasserian ganglion, he had such alarming hemorrhage that he packed the wound for a week and waited, and during this time the patient had plenty of pain, and at the end of that time with freedom from further hemorrhage he went on and removed the ganglion and got entire relief. I think it is hardly fair to think that manipulation of the nerve will bring relief.

Dr. Aldrich: I think that case was hardly a fair test of the question for we are not sure that the pressure of the packing may not have been the cause of pain.

Dr. Stern reported a case of Tabetic Arthropathy of the knee joint occurring in a case of Paretic Dementia. This case report will appear in July issue of GAZETTE.

Dr. Aldrich: Dr. Stern has asked me to say a few words with regard to this patient's mental condition. I visited the patient with the doctor and a careful examination reveals what I believe to be undoubtedly a case of paretic dementia. In view of the fact of rather active signs of syphilis previously, I believe that we are warranted in looking upon his aphasia as an early manifestation of his paretic dementia. I have had under observation for the last two years a man who has presented a remarkable case of slowly progressing paretic dementia. He has been a bookkeeper for a newspaper here in the city for years, and in this time, though slowly succumbing to the disease, has been able to do his work in the narrow field in which he was accustomed to work without making any mistakes. I learned, however, that he had had a number of falls at different times in the last few years, and that he has suffered no less than five fractures within a period of five years. This I find is not an uncommon occurrence in the onset of paretic dementia, though other symptoms may be absent. Three years ago this patient suddenly lost his speech, which returned as suddenly as it went. I have records showing that he has suffered this temporary loss of speech as many as twenty times since that time. But it was only lately that the mental symptoms have become pronounced. The first symptom of mental difficulty noticed by his friends was the announcement to the people where he boarded that he was sorry they were about to move, and when asked what made him think that they were going to move, he said that he knew it because he had seen the ships coming up into the yard to take their goods. Yet this man had been doing business for years with such marked dementia and this was the first symptom noted of any mental aberration. The question comes to us—when does paretic dementia appear? I was called to see a case of a man who within three years had shown no marked symptom except a complete change of disposition, from a man of good disposition to one of an exceedingly irritable disposition. The case ran along for about a year with no other symptoms, and then he suddenly developed ataxia, loss of knee jerks, Argyle Robertson pupil, etc., and yet the onset had previously been so slow that no marked symptom aside from change of disposition had been noted, though it was true that he had had losses in business and had sat down with no ambition to recuperate his fortunes. The

trouble probably began at this time, for he had said to his wife that he had lost heavily and they must be saving and economical, yet he made no attempt to make money to replace his losses. Now as to this case of Dr. Stern's, I do not know how we can decide when the dementia began. I should regard the aphasia as one of the first symptoms of paresis. The man has evidently been going from bad to worse, showing very little cerebral change until within six months. I think, however, that this is the time for Dr. Stern to file an objection to the name tabetic arthropathy for the affection is not tabetic. There is one thing that is peculiar, at least it seems so to me, and that is that in ordinary tabetic affections you can, for instance, bend a man's foot down and flex or extend the knee, and he cannot tell what you are doing for the sense of joint position is not intact, but in this man under the same test can tell you what you are doing. This difficulty with reference to the field of vision can only be explained on the ground that it is a mental effect for the man certainly sees. I might also mention that this kind of joint affection is seen in syringomyelia. It is a very interesting case and has been very ably reported.

Dr. A. W. Lucke: I have had the pleasure of seeing this case a number of times with Dr. Stern. The diagnosis, though difficult at first, has cleared up of late. We have to differentiate in this case between cerebral syphilis and general dementia. Cerebral lines can be divided into three main classes, the arterial, the meningeal and the diffuse syphilis of the brain. The arterial form, in which we have endarteritis of the intima and gummatous infiltration of the media and adventitia, would give signs of paralysis, due to lack of nutrition, either from the basilar or sylvian artery, or both, which symptoms are absent. In the meningeal form we get gummatous deposits on the dura and arachnoid, either on the convexity or base of the cerebrum, which cause pressure, followed by atrophy and softening. Symptoms resulting from meningitis on the convexity are psychical, headache, convulsions, etc. From the base we also have psychoses, headache, vertigo, vomiting, optic neuritis, polyuria and polydipsia, while the cranial nerves most often attacked are the motor oculi and abducens, being pressed against the sphenoid, causing inequality of pupils, ptosis and abducens palsy. The absence of most of these symptoms, I think, excludes syphilitic meningitis.

In diffuse syphilis of the cerebrum, which type this case most nearly resembles, we have a combination of the former two. The

diagnosis lies between this form and general dementia, that is the first stage of the latter disease. The age and lapse of time after infection rather favors diffuse syphilis. The psychical symptoms could be found in either malady, although they are not very marked in Dr. Stern's patient. These symptoms include insomnia, unconsciousness, loss of intelligence and disturbance of ethical functions. Cerebral pressure, as headache, especially nocturnal, nearly always accompany lues cerebri, though generally absent in general paralysis. Ophthalmoscopic examination shows neither optic neuritis, found more often in syphilis, nor gray atrophy, as in paralytic dementia. Pupils are unequal, a symptom found in both troubles, though not irregular, as often in paresis. No deviation of the bulbi, as often in general syphilis. Aphasia is symptomatic of both maladies. The other cranial nerves show no changes. Monoplegia and hemiplegia are absent, as are also epileptic attacks. His speech is in a monotone, though he has no stumbling of syllables, as Kraft-Ebing describes in paresis. His writing is very characteristic of dementia paralytica. The lines are irregular, showing a rough tremor, while letters and syllables are omitted. From these symptoms I think we are justified in making a diagnosis of general paralysis of the insane.

Dr. Aldrich: There was one thing I meant to mention and that was there was a point not touched upon in the diagnosis as strongly as it should have been, and that the enlargement and changes in this joint were painless. This is a most important symptom, even when we lack other symptoms of the disease. Painlessness and subluxation of the joint without other symptoms would be almost enough for us to make the diagnosis from even if we had no other symptoms.

The society then proceeded to the annual election of officers, and the President appointed a nominating committee consisting of Drs. Bunts, Baker and Hamann. The following officers were nominated: President, Dr. C. A. Hamann; Vice-Presidents, Dr. L. S. Chadwick and C. C. Stuart; Secretary, Dr. Frederick C. Herrick; Treasurer, Dr. Charles G. Foote; Trustee, Dr. D. S. Hanson; Board of Censors, Drs. L. B. Tuckerman, G. W. Crile and B. F. Milliken. The Secretary was instructed to cast the ballot of the society for these officers.

Following this came the address of the retiring President, Dr. C. J. Aldrich, upon "The Diagnosis of Meningitis."

The resignation of Dr. Burton was received and accepted, and after eulogistic remarks by Drs. Chadwick, Milliken, Baker,

Aldrich and Bunts, it was unanimously moved that the rules of the society be suspended and Dr. Burton be elected at this meeting to honorary membership. The motion was carried and the Secretary also instructed to invite Dr. Burton to be present at the next meeting of the society and give a paper on reminiscences of medical work in Cleveland.

The meeting adjourned.

Notes and Comments.

Dr. H. E. York, of Fairport, was married on 29th May.

Dr. Ralph C. Pease, of Chardon, was in the city on 24 May.

Dr. G. W. Moorehouse has removed from 946 Prospect street to 39 Cutler street.

Dr. and Mrs. George Seeley Smith visited in Buffalo the latter part of May.

Dr. A. R. Baker and family have moved to their summer cottage at Villa Beach.

Dr. J. V. Kofron is the newly elected Secretary of the Ohio State Pediatric Society.

Dr. I. A. Tripp, of Nottingham, is able to attend to practice again after a severe illness of several weeks.

Dr. William E. Shackleton has been appointed an assistant in Ophthalmology in the Medical Department of Western Reserve University.

Dr. William E. Lower has returned to the city and resumed practice after an absence of several months in the Philippines as army surgeon.

Dr. D. S. Hanson returns to the city about the 1st of June after spending several weeks in Philadelphia taking a course in bacteriology and blood examination.

Lorain County Medical Society met at St. Joseph's Hospital, in Lorain, on the 14th of May, when the following program was presented: Leucæmia with presentation of case, Dr. A. N. Garver. Report of State Medical Society meeting, Dr. W. C. Bunce. Meningocele with report of case, Dr. C. F. Gilmore. Injuries of the Urethra, Dr. A. M. Webster. Presentation of Surgical Cases, Dr. Wheatley.

Ohio State Pediatric Society elected the following officers for the ensuing year: President, Dr. D. Hanson, Cleveland; 1st vice-president, Dr. L. V. Fitzpatrick, Cincinnati; 2nd. vice-president, Dr. J. H. McCassy, Dayton; secretary and treasury, Dr. Josesh V. Kofron, Cleveland.

The Ohio State Medical Society had a good representation from Cleveland. Among those who were there are the following: Dr. C. F. Hoover, Dr. C. F. Dutton, Dr. L. B. Tuckerman, Dr. H. W. Rogers, Dr. J. F. Hobson, Dr. D. S. Hanson, Dr. J. N. Lenker, Dr. N. Stone Scott, Dr. F. E. Bunts, Dr. G. W. Crile, Dr. J. E. Cook, Dr. W. H. Humiston, Dr. P. M. Foshay, Dr. F. C. Taylor, Dr. T. C. Martin, Dr. A. F. Spurney, Dr. S. H. Large, Dr. M. A. Albl, Dr. M. Borts.

Ohio State Medical Society.—The annual meeting of this Society was held in Cincinnati, May 8, 9 and 10. Dr. Frank Billings, Chicago, and John A. Wyeth, New York City, delivered the addresses in medicine and surgery, respectively. The election of officers resulted as follows: Dr. Edmund C. Brush, Zanesville, president; Drs. E. Gustav Zinke, Cincinnati, Stephen S. Halderman, Portsmouth, James C. M. Floyd, Steubenville, and William S. Phillip, Belle Center, vice-presidents; Dr. James A. Duncan, Toledo, treasurer, and Dr. P. Maxwell Foshay, Cleveland, secretary and editor.

American Proctologic Society.—The third annual meeting of this society will be held at the Hotel Aberdeen, St. Paul, Minn., on June 4 and 5, 1901, under the presidency of Dr. James P. Tuttle, of New York. The secretary is Dr. William M. Beach, of Pittsburg, Pa.

Prof. J. George Adami, of McGill University, Montreal, Canada, has been appointel vice-president of the section of pathology and bacteriology of the International Congress on Tuberculosis, to be held in London, England, in July, under the patronage of his majesty, King Edward VII.

Dr. Weil claims that every form of vomiting of pregnancy can be relieved by a 20 per cent. solution of menthol in olive oil, ten drops, taken in sugar, whenever the nausea appears.

Dr. H. T. Webster recommends potassium carbonate as a remedy for urticaria or "hives." Add ten grains of the drug to four ounces of water, and direct one teaspoonful of the mixture to be administered every hour.

Dr. Francis Delafield one of the leading pathologists in the country, will give up the chair of the practice of medicine in the College of Physicians and Surgeons, New York, June 1. He asked to be relieved of the professorship some time ago. Dr. Walter Belknap Jones has been appointed lecturer on the practice of medicine.

Dr. Alexander Graham Bell, the inventor of the telephone, has been serving as a special agent of the census bureau in charge of the enumeration of the deaf, dumb and blind population of the country, and is now preparing his report. Mr. Bell is a millionaire several times over, but is entitled to \$6 a day from the government while he is employed in this work. In his early life he was an instructor in a deaf and dumb asylum and a large part of his time is now spent in the investigation of means for promoting the education of deaf-mutes and sightless people.—*Philadelphia Medical Journal*.

Dominion Medical Council, Canada.—On the 13th of April Dr. T. G. Roddick, M. P., introduced his bill for a Dominion medical council in the Dominion parliament. In his address to the house he explained the provisions of the bill, the details of which have already been published in the *Journal*. In going over the constitution of the board, Dr. Roddick gave a concise history of the repeated attempts to form this council. Each province will be given three members and the homeopaths will also have three representatives. Dr. Roddick gives the medical population of the provinces as follows: Prince Edward Island, 90 practitioners; Nova Scotia, 476; New Brunswick, 243; Quebec, 1,400; Ontario, 2,500; Manitoba, 344; British Columbia, 314; Northwest Territories, 95. The bill received its first reading.—*Journal A. M. A.*

Sterilization of Catheters.—M. W. Herman (*Centrabl. F. Chir.*, Jan. 19, 1901) has found that silk catheters may be boiled without damage in a solution of ammonium sulphate, precisely after the method of Elsberg for boiling catgut. The smoothness of their inner and outer coats, their elasticity and their general wearing qualities are not affected by boiling continuously or interruptedly. The catheters may be taken directly out of the solution and used, without apparent damage to the urethra by chemical irritation. The author has found the same method adequate for sterilization Nelaton's catheters, elastic sounds, ball-sounds, filiform bougies and similar instruments.—*Med. News*.

A hot bath at bed time will relieve many cases of insomnia.

Ipecac assuages the rough action of podophyllin when combined with it.

Prominent papillae in the center of the tongue indicate small doses of calomel.

Soak a blood stain in kerosene and wash out with warm water after it has stood a while.

For night sweats *tr. hydrastic Canadensis*, from five to twenty-drop doses, has proved valuable.

A Monument to Pasteur is to be erected at Dole, his native place. It will be inaugurated in 1902.

Rubber goods hardened by age may be softened and nicely restored by soaking in dilute ammonia water.

In many cases of acute abdominal pain a few drops of chloroform on sugar will often give immediate relief.

A large cupfull of hot water drank every half hour, persistently, has cured severe cases of delirium tremens.

Salicin, five grains every three hours, is a most valuable remedy in acute rheumatism and in all muscular pains.

The Grave of Hippocrates is said to have been discovered recently in the course of some excavations at Larissa, in Thessaly.

Several cases of edema glottidis have been quickly relieved by hypodermic injections of pilocarpine, given about 20 minutes apart.

The Plague at Cape Town—Up to Saturday, May 11, it is stated that there have been 610 cases of plague and 275 deaths from the same at Cape Town.

Among the members of the present Canadian parliament elected last November are eighteen physicians, the best known of whom is Dr. T. G. Roddick, of Montreal.

The medical bills that were introduced in the Minnesota legislature have been defeated after a long and fruitless debate. The enacting clause of each bill was stricken out.

Cottage Hospitals in Canada.—Countess Minto, wife of Canada's governor-general, has written a letter to the mayor of Ottawa stating her willingness to become the head of a movement to establish cottage hospitals throughout Canada.

In nocturnal incontinence of urine, atropine, in doses 1-500 grain, three times a day, cured twenty-nine out of thirty-seven cases.

Living in the open air all day, and free ventilation of the sleeping room at night, will do much to promote sleep in insomnia.

Successive crops of boils in gouty patients may be prevented by the use of colchicum in doses of from a half to two-thirds of a grain per day.

A dose of castor oil, although not sufficiently large to produce a movement of the bowels, will frequently allay the colicky pains in infants.

Olive oil by inunction has been used with great success in the treatment of wasting diseases in children, and as a cathartic in place of castor oil. Its use in colic of gall-stones is well known.

A Dangerous Post is that of physician to the ruler of Turkey, if we may believe a tale recently told by the London *Daily Express*. According to this paper, an aurist, who was lately treating the Sultan for an affection of the ear, accidentally touched the drum membrane, causing his patient intense pain. His Majesty, believing that an attempt was being made on his life, drew a revolver and shot the physician dead. A chamberlain, hearing the shot, entered, and the Sultan fired at him, wounding him.

It is indeed a serious question as to which century will go down in history as the electrical century. It is certain that the century recently closed has left a notable record in the public mind and appreciation. The inventions in the electrical field during the nineteenth century were marvelous, and it means a good deal to say that the record of the twentieth century is destined to surpass the record that has been made. To even imitate such a possibility is expressive of great confidence in the superiority of the human mind. Perhaps a better idea of the possibilities will be obtained after the exhibits of the Pan-American Exposition have been seen. In every way they will portray what has been accomplished, and if people can turn from this exhibit feeling that the present century will develop greater things, then indeed may the world look forward to a most glorious century of invention.

Small Doses of Antitoxin.—Dr. Musser reports a series of cases in which small doses of antitoxin were used in diphtheria with very favorable results. There were none of his cases that were operated upon, and he argues in favor of this method of administration of the antitoxin. He believes that it does away with the occasional ill effects of the remedy and proves as effective as a curative agent.—*Univ. Med. Mag.*

A bill has been introduced in the Minnesota legislature providing for a state board of medical examiners to be appointed by the governor from the different schools of medicine. This bill is endorsed by the State Medical Society, and provides for reciprocity with other states, which require the same standard of qualifications as Minnesota. In such cases, examination can be dispensed with. In other cases, the candidate must submit to an examination.

Preservative for Suprarenal Extract.—Boric acid, glycerin, or weak alcohol will preserve the gland for some weeks, but materially weaken its physiological effect. Camphor by its odor prevents detection of decomposition. Silver and mercury preparations are precipitated and render the extract practically worthless. By experiments on animals and subsequent tests clinically, Seymour Oppenheimer (*N. Y. Med. Jour.*, Mch. 9, 1901,) has found that an almost permanent solution can be made by adding gm. 4.0 (i) of dried suprarenal to gm. 30.0 (i) of one-per-cent. solution of resorcin, and that the hemostatic and vasoconstrictor properties are not affected.

Cesarian Section Three Times in the Same Person.—J. W. Coakley, Mt. Etna, Iowa, (*Medical Brief*) reports Cesarean section performed three times in the same person. The first operation was in August, 1893. The woman was at that time 30 years of age and in her fourth pregnancy. One of these had terminated in abortion and there had been two craniotomies on account of contraction of the pelvis. In order to save the fourth child the abdomen was opened and a living child delivered. Recovery was rapid and uneventful. The next operation was performed in July, 1895, and was equally successful both for mother and child. The third Cesarean section was made in March, 1900, and although the woman was in poor health with albuminous urine she went through the ordeal successfully and recovered rapidly. The author thinks the operation as safe as any other laparotomy and to be preferred to symphysiotomy or craniotomy.—*Med. Standard.*

A Monument to Professor Skene.—A movement is under way in Brooklyn to raise a fund of \$25,000 for the erection of a bronze statue of the late Dr. A. J. C. Skene, of that borough, in Prospect Park.

The Infectiousness of Cancer.—We regret to learn that Dr. Joseph Eisen, of San Francisco, with whose excellent work in the study of the supposed micro-organism of carcinoma our readers are familiar, has been operated upon in St. Luke's Hospital in that city for cancer. The operation was successful and the patient is recovering. Dr. Eisen believes that he became inoculated with the cancer microbe while studying germs through the microscope.

An International Sanitary Treaty.—Two South American states, Argentina and Uruguay, have made a treaty of sanitary alliance and protection as regards infectious diseases, especially bubonic plague. It provides for mutual inspection and quarantine arrangements sufficient to protect either country from invasion of disease from the other, without any undue interference with communications or commerce. It would be well if the example thus set were imitated by other nations.—*British Medical Journal*.

How to Clean Hypodermic Syringes.—Syringes whose canals have become obstructed so that a fine wire cannot be drawn through are cleaned by holding them for a moment over a flame; the foreign substance is thus quickly destroyed and driven off. If a wire has been rusted in the needle, it should be dipped in oil before holding over the flame. To remove the rust from the interior of the canula it is well to pass oil through the canula, heat it, then rinse it out with alcohol. The needle is then ready for use.

A Question of Privilege.—In a divorce suit recently tried in St. Louis, the counsel for the plaintiff, the woman, wished to introduce the testimony of Dr. E. S. McKee, of Cincinnati, concerning a communication made to him by the husband regarding his wife, who was Dr. McKee's patient at the time. Dr. McKee refused repeatedly to testify before a notary in Cincinnati, holding that the communication was a privileged one, and was finally constructively committed to jail. The case was brought before Judge Hollister, of Cincinnati, who ruled that, as it was the woman and not the man who was the actual patient, the husband's communication was not a privileged one.

For lighting small villages acetylene gas has won a field of usefulness, while throughout the country there are many isolated dwellings that now enjoy the rich, bright light of this new gas. In building new houses farmers have come to recognize the value of installing a pipe system in order that acetylene may be used. At Niagara Falls there is the largest calcium carbide plant in the world, and it is from this carbide that acetylene gas is generated. There will be a magnificent display of acetylene at the Pan-American Exposition.

A Monument to Bunsen, Kirchhoff and Helmholtz.—A committee, largely composed of medical men, has been formed for the purpose of erecting a triple monument in Heidelberg to Bunsen, Kirchhoff, and Helmholtz. Special appeals for contributions are to be issued to learned societies and academies in the German empire, as well as to personal friends and admirers of the late scientists, but it is understood that the public at large will not be invited to contribute. The chairman of the committee is Dr. A. Kussmaul, of the University of Strasburg.

To Prevent Pain When Inserting Hypodermic Needle.—The spot where the needle is expected to enter is touched with a toothpick dipped in strong carbolic acid; a white spot immediately appears (due to coagulation of the albumen in the tissues). Shortly after perfect anesthesia of the spot is manifest and the hypodermic needle can be pushed through the skin without pain at this point and the infiltration of the tissues begun. If a large arc is to be injected, several spots are marked with the toothpick dipped in the strong carbolic acid, the needle being inserted through these points.

Danger of Syringing the Nose.—Dr. E. Amberg condemns the routine use of the syringe in the treatment of nasal catarrh, especially in children, on account of the short and wide Eustachian tube. In cleaning the nose, as a rule both nostrils are closed, and it is not surprising that in this way microbes are thrown into the middle ear in which they find a favorable soil to grow. Bacteriologic examinations by Netter and Zaufal showed that after irrigation of the nasal cavity, *diplococcus pneumoniae* Fraenkel-Weichselbaum and *streptococcus pyogenes* have been found in the tympanic cavity. In using a syringe a nasal tip should be used which does not close the entrance to the nose. Instruments like Fraenkel's or Bermingham's nasal douche are safer for the patient.—*Phila. Med. Jour.*

Be sure and have little babies dressed very cool in hot weather.

Burgraev says typhoid is a disgrace to civilization and should be eradicated by sanitation.

Codeine and apomorphine is an excellent combination in dry cough and is very serviceable in later stages of phthisis.

Do not forget the value of small doses of perchloride of mercury in the treatment of infantile diarrhea when the stools are green, slimy and offensive.

On account of the existence of smallpox in an epidemic form at Progreso, Yucatan, the U. S. Marine Hospital service has stationed a medical officer at that point to inspect all vessel leaving those ports for ports in the United States or its dependencies, and to inspect the passengers and their baggage. If necessary, baggage will be disinfected before shipment. This measure is deemed necessary for the protection of Cuba.

X-Ray without Electricity.—A cable to the *New York Sun*, April 2d, reports that it was announced on April 1st at a sitting of the Academy of Sciences that M. Curie, a chemist, had separated a new gas from rhodium. The gas is intensely phosphorescent, and will glow for months in the dark. It was also announced that M. Naudon, a scientist, had found means of producing X-rays without electricity, by exposing a metal plate to the rays of the violet end of the spectrum.

The Doctor and the Druggist.—From the prize essay contributed by "New Haven" to the *American Druggist* these bits of good advice are taken:

To cultivate the good opinion and the friendship of the doctor the druggist should remember that he is a profession man, and this point should be observed in all the relations of the druggist with the doctor.

"The payment to doctors of a percentage on prescriptions is a bad practice. Only those druggists so situated that they need not care whether they ever see a customer a second time or not can afford to risk its effect upon the public. It is a question, however, if they can afford to risk its effects on the doctor's opinion of them. The doctor who is willing to charge a patient directly for his services, and then take a commission on the prescription from the druggist, is a combination of a business and professional man that may command success, but never respect."

J. Pierpont Morgan's Gift to a French Hospital.—J. Pierpont Morgan has given 50,000 francs to the hospital at Aix-les-Bains, and the municipality has marked its appreciation of the gift by presenting to him a bouquet.

A Tragic Death.—It has transpired that a mechanic was locked in one of the ballast compartments of the steamship *St. Paul* when she was launched five years ago. The skeleton has just been found in the hull of the vessel, which is undergoing repairs.

A Trolley Ambulance.—The officials of the Brooklyn Rapid Transit Company have in mind the establishment of a receiving hospital for the extension of first aid to persons injured on the lines of the company. There will also be a trolley ambulance service provided.

A New Use for Quarantine.—According to a veracious correspondent of the London *Daily Chronicle*, the Sultan learned that a band of anarchists was on the way to Constantinople with the intention of assassinating him. In order to keep them out, he got up a plague scare and imposed a very strict quarantine.

German Evasion of Military Service.—A number of physicians and others were convicted recently at Elberfeld, Germany, of administering drugs to young men with the purpose of fraudulently enabling them to evade military service. The heaviest punishment imposed was seven years' imprisonment and the deprivation of civil rights for five years more.

The board of trustees of the Ohio Hospital for Epileptics met, May 17, and received the formal resignation of Dr. H. C. Rutter, manager, which had been requested by Governor Nash. Dr. Rutter endeavored to obtain the sanction of the board for his discharge of the director of the Pathological Laboratory, Dr. A. P. Ohlmacher, but a letter from the governor to the trustees was read, expressly forbidding this action.

In Tokio, the capital of Japan, the proportion of cremations to burials exceeds that of any city in Europe or America, being as high as 43 per cent. in 1898, the rate rising from year to year. The method employed is uniform for all classes, the charge varying according to the amount of personal superintendence, the first class having two attendants; the second, one for each cremation; whilst in the third class several furnaces are placed in charge of one attendant.

Yellow Fever in Yucatan.—It is reported from Oaxaca, Mex., that a yellow-fever epidemic in Merida and other cities of Yucatan is causing many deaths, particularly among the foreigners. News has just been received of the death, of yellow fever, of Dr. Hormah Rubitsa, a prominent German physician of Merida.

Seven graduates of the Pacific Coast Regular College of Medicine, comprising the first graduating class of that institution, which began its work only about nine months ago, have been refused licenses to practice by the board of medical examiners of the Medical Society of the State of California, on the ground that their alma mater does not meet with the minimum requirement for medical colleges, as adopted by the board December 4, 1900.

College Rivalry in Hospital Appointments.—At the annual examination for internes at the Cincinnati City Hospital there were twenty-seven candidates, seventeen from the Ohio Medical College and ten from the Miami. Of these ten were successful in securing appointments, six from the Ohio and four from the Miami. There is always a rivalry between the two colleges at this examination, but the result was mostly a tie at this, though the Miami men claimed a slight advantage.

The Invention of the Ophthalmoscope.—Drs. Harry Friedenwald, of Baltimore, and Casey A. Wood, of Chicago, constitute a committee of the American Medical Association appointed to arrange the details for a commemoration at the St. Paul meeting of the fiftieth anniversary of the invention of the ophthalmoscope. In order to make the historical exhibit of ophthalmoscopes as complete as possible, the committee requests the loan of instruments of the older models from any who may have such in their possession.

War on Mosquitos.—The South Orange (N. J.) Village Improvement Society will try to rid that community of mosquitos during the coming season, and has appointed a committee which will seek to carry its resolutions into effect. It is the intention of the society to advocate the abandonment of rain barrels, the screening of water tanks in houses, and the placing of a thin layer of crude oil in cesspools and in pools of stagnant water which it is not practicable to drain. A free lecture on mosquitos will be delivered in the village shortly by Prof. L. O. Howard, of the Department of Agriculture, Washington.

Vomiting after coughing is generally due to mechanical disturbance of the stomach induced by the violent effort. In such a case let the patient eat but a moderate quantity at a time, and rest quietly after dinner.

Smallpox continues to prevail in this city to a degree which does not speak favorably for the efficiency of the board of health under its present management. The members of the police force were vaccinated last week on the order of Commissioner Murphy, a policeman having been taken with smallpox a few days ago.

Stock-Market Speculation and the Death Rate.—In a recently issued report of the Chicago board of health, an increase in the death rate among persons over 60 years of age is attributed to the excitement attending stock speculation. Of 566 deaths during the week, 124 were of persons 60 years old or older. This is an increase of 26 per cent. over the previous week and of 24 per cent. over the corresponding week of 1900.

Trigeminal Neuralgias.—Improve the general conditions. Apply ice or dry heat. In severe paroxysms give morphine injections. In tic give the crystalline alkaloid aconitine gr. 1-100 every two hours until numbness of the tongue ensues. For continued use, morphine gr. 1-12, strychnine gr. 1-80 t.i.d., nitroglycerin gr. 1-100. Croton chloral is often disappointing. Electricity with the positive pole to the painful area, with a galvanic current of 8 to 15 m.a. frequently gives gratifying results. Gauze wet with cocaine (twenty per cent.), chloroform, or tincture of aconite may be laid over the painful part and the negative pole of the battery applied with 12 to 20 m.a. for a few minutes.—*McGregor, The Physician and Surgeon*, January.

Pure Beer Bill for Great Britain.—This bill was read for the second time in the English House of Commons on Wednesday, March 27th. The *London Daily Telegraph* points out that, under the scheme in its present form, beer is divided into two classes—malt beer and part-malt beer. Malt beer is described as the product of barley malt, with the addition of hops, yeast, water, and such substances for the preparation of beer as may be approved by the commissioners of inland revenue. Part-malt beer means any beer other than malt beer. While brewers who employ malt substitutes will be allowed to call the product beer, they will be obliged to sell it under a designation which indicates that other ingredients have entered into its composition, and thus the main purpose of the champions of pure beer will be accomplished.

In making applications to the throat do not have your applications "dripping" wet with the remedy. Sometimes some of the medicine drops into the larynx and the coughing defeats your efforts.

For diarrhea of children, accompanied with slight inflammation, straining, and the passage of jelly-looking matter, but no true dysentery, five drops of castor oil, given every hour in water with sugar and gum, is an excellent remedy.

The bill giving the New York State board of health power to regulate the type and leading of books, newspapers, and serial literature, to protect the public eyesight, has been reported favorably by the public health committee of the assembly.

The legislature of Pennsylvania has been asked for an appropriation of \$60,000 for the establishment of free homes for consumptives in the mountains near White Haven. The idea at present is to erect about ten cottages where these patients may be treated.

It is reported from Washington through the Department of Agriculture that during 1900 \$6,000,000 worth of young animals were saved by the prompt application of remedial measures for black-leg. The department, during the year, distributed 2,500,000 doses of vaccine for that disease.

The hospital ship Maine, after thirteen months' active service in South Africa, is to become a permanent addition to the British fleet. The vessel's complement of American surgeons, physicians, and nurses, thirty-one in all, took formal leave of their ship at a reception tendered them at Portsmouth, England, January 16.

Mrs. Love M. Palmer, widow of Dr. A. B. Palmer, formerly professor in the medical department of the University of Michigan, died on March 9. She leaves the sum of \$85,000 to the University. Of this sum, \$20,000 will go to building a new ward for the hospital, and \$15,000 to maintain free beds in that institution.

The Minnesota state board of medical examiners has recently done good work in suppressing quackery in Minneapolis, according to the *Northwestern Lancet*. Some advertising quacks have been forced to discontinue the practice, while a third one, representing himself as a physician, has been bound over to the grand jury.

Simple tapping, under full antiseptis, may be relied upon to relieve any hydrocele, and will cure a small percentage of cases.

The Russian Government has authorized the foundation of a university for women, to have only faculties of medicine, pure science, and natural science. A merchant of Moscow has given 3,000,000 roubles for its establishment.

Bromide of camphor is especially valuable in diminishing the attacks of epilepsy and undoubtedly diminishes the vertigo which accompanies this condition. Where the temperature falls below normal, the remedy should be immediately withdrawn.

The Nathan Lewis Hatfield Prize for Original Research in Medicine, given by the College of Physicians of Philadelphia, has been awarded to Professor H. F. Harris, M. D., of Atlanta, Ga. The prize consists of the sum of \$500 for an original research, conducted at the instance of the committee, entitled: A Study of the Alterations Produced in the Large Intestine of Dogs by the *Amoeba coli*, by Heat, and by Various Chemical Substances, with Notes on the Anatomy and Histology of the Viscus.

McGill University purposes raising its standard of medical matriculation, and the change will come into effect in September, 1902. After that date all candidates will be required to show at least a practical knowledge of chemistry and a sound theoretical acquaintance with physics, statics, and dynamics. Greek, German, and French will be the only optional subjects, after that date, and one or another of these must be taken. Later on, it is the purpose of the authorities to still further raise the standard by requiring all candidates before matriculating in medicine to show that they have taken the first year arts course. Not long ago McGill lengthened its session from six to nine months and established a combined arts and medical course. Last year great improvements were made in the pathological department, and with the improvements which are in contemplation for the present year, combined with these advances in matriculation requirements, McGill hopes to lead the world in its medical department. The present changes in the matriculation standard are designed to keep students constantly at work, not allowing of their participation in other work outside their college course.—*N. Y. Med. Jour.*

Druggists and Medical Practice.—The medical detective of the Ontario Medical Council has filed information against eight Toronto druggists for practicing medicine without a license. The cases will be up in police court next week, and will be watched with interest.

Seats for Employes.—The Sem. Med. says that the French law, which went into operation with the new year, decrees that seats corresponding to the number of female employes must be provided in stores. The German law requires "a sufficient number of seats," and the English law of 1899 one seat for each three female employes.

Hospital for Consumptives.—Senator Hutchinson, of Mercer county, will introduce a bill in the New Jersey legislature, asking for an appropriation of \$50,000 for the establishment and equipment of a hospital for the care and treatment of cases of tuberculosis. The measure is the result of the action taken by the Trenton Board of Health on the protection against the spread of tuberculosis in healthy communities, and the bill was prepared and approved by the Mercer County Medical Society. —*Journal A. M. A.*

The Spanish government has resolved to thoroughly enforce the regulations enacted in 1898, that no physician is allowed to practice unless he has inscribed his name as a member of the local medical society. Each town of more than 14,000 inhabitants must organize one of these societies or academies of medicine, to promote the moral and material interests of the profession and give advice on questions submitted by the national or municipal authorities or courts. The *Semaine Medicale* states that they are already organized in a large number of towns.

Photographing the Stomach.—The *New York Tribune* gives the following extract from the *London Globe*: "Drs. Lange and Melzing have succeeded in taking photographs of the mucous membrane of the stomach in the living subject. A stomach tube, 66 cm. long, with a diameter of 11 mm., is introduced, having at the lower end an electric lamp and at the upper end a camera. The stomach is first emptied and washed and then distended with air. Then fifty pictures can be taken in rapid succession in from ten to fifteen minutes. By turning the apparatus on its axis all parts of the mucous membrane can be pictured. The photographs are about the size of a cherry-stone, but, of course, can be enlarged to any extent."

THE Cleveland Medical Gazette

JULY, 1901.

Original Articles.

FOODS, FOOD ECONOMICS AND FOOD ADULTERATION.*

BY CHARLES F. MABERY.

Professor of Chemistry, Case School of Applied Science.

If man does not live to eat, but eats to live, a good share of his best thought must be given to what he shall eat and how he shall best care for the functions that support life if he hopes to fulfill his highest duty to himself and his environment. Thought and action are dependent directly on the application of energy produced by chemical changes that have their origin in the stomach. The subject of human foods may be considered under several propositions:

1. Man finds himself in a paradise of foods, free to select from the greatest variety, according to his individual taste.
2. By an intelligent selection the needs of the body may be economically satisfied with sufficient indulgence of the appetite.
3. This selection must include a suitable proportion of protein, fats and carbohydrates to maintain a normal condition.
4. It is the duty of every person to inform himself as to the composition of foods, the functions of digestion, and the connection of the use of foods and bodily habits with a healthy condition.

An excellent illustration of the careless ignorance too often shown in the use of foods is afforded by the breeder of fancy stock. This individual informs himself from the best sources of information as to the amounts of the different food materials that will furnish the proper proportions and weights of protein, fats and carbohydrates to keep each animal in a condition to yield the

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best pecuniary return. At his own table he indulges in those forms of food that are most conveniently obtained, or those most acceptable to his taste with no regard to proportions nor amounts. No thought is given to his own bodily needs until excessive indulgence in some direction culminates in a diseased condition that requires medical advice. The only difference between the individual in this illustration and the great body of consumers is that he does master the knowledge and application of animal foods because it affects his pecuniary interest.

Any discussion of foods cannot be considered complete without some consideration of the air which supports the chemical changes within the body, and of water, the only medium in which these chemical changes are possible. But these subjects can be only briefly alluded to in this connection since the time of several hours would be necessary for their proper consideration.

The natural atmosphere maintains itself in a state of purity. It is only when huge volumes of smoke or injurious gases from factories are sent forth in densely populated districts, as in cities, or in closely confined spaces poorly ventilated as in sleeping apartments, that the atmosphere becomes dangerously adulterated. A smoke-laden atmosphere is injurious because the soot collects in the throat and lungs and causes irritation, and because it contains acid from the sulphur burned in the coal.

An unventilated house atmosphere is injurious, because it becomes unduly saturated with moisture which interferes with healthy respiration, and with carbonic acid which replaces an adequate supply of oxygen. Good ventilation especially of sleeping apartments is as essential to a healthy bodily condition as a proper selection of foods. The house atmosphere is often contaminated by gases from the heating apparatus especially hydric sulphide from the sulphur contained in the coal, and that deadly product of incomplete combustion, carbonic oxide, which, having 250 times the affinity for the haemoglobin of the blood that oxygen has, replaces the latter with such a deadly effect that one-half of one per cent. in a confined atmosphere is sufficient to produce death.

One of the great and difficult problems of modern civilized life is the maintenance of an adequate uncontaminated water supply. The Metropolitan Water Board of Eastern Massachusetts has decreed that every inhabitant shall have a practically unlimited supply of good water, and this board is now expending \$43,-000,000 to accomplish this result.

With increase in population, concentration within the limited areas of cities, great diminution of rainfall in seasons of protracted droughts, and irregular and spasmodic outflow from watersheds due to the removal of forests, the maintenance of an abundant water supply has become a matter of considerable difficulty. The limits of the present paper do not permit a discussion of the qualities of drinking waters. It must suffice to say that good potable water should be free from present or past contamination with sewage or drainage, and uncontaminated by decaying vegetation; it must not contain too large a proportion of mineral constituents. Concerning the water supply from Lake Erie, when the water is perfectly clear it is a good potable water. But when heavy winds stir up the muddy bottom, charged as it is near the shore with partially decayed organic matter, or when easterly winds drive sewage near the point of intake, it is not safe without efficient filtration or better, boiling.

Approaching next that portion of our subject, what man shall eat, we find a great accumulation during the last two decades of useful knowledge concerning food supply and food consumption. And as the better care that man is taking of himself appears in the greater longevity of the human race, with substantial aid, no doubt, from the vigor and stamina handed down to the present generation as a result of the frugal and hardy habits of his forefathers, so the extension of a knowledge of his foods will doubtless be apparent in still further increase in longevity, provided it is not offset by increased mental strain or indulgence in luxurious bodily habits.

In view of the recent discussion of the place that alcohol should have in a system of food economics, perhaps a word should be said in this connection concerning the use of alcohol as a food. According to the best authority, alcohol may be regarded in a certain sense as food, or as a poison, depending on the quantity taken into the system. Sugar and alcohol retard digestion at first in the stomach, but after entering the circulation, the digestion is accelerated. In moderate quantities as in beer, whiskey, wines, alcohol acts as a stimulant to digestion, but larger amounts weaken the digestion and may cause disease or death, hence act as a poison. After entering the circulation alcohol is oxydized like all foods, and this heat of combustion supplies energy. But it is only in the sense that its oxydation in limited amounts furnishes bodily heat that it can be considered as a food. It does not furnish ma-

terial for fat, nor muscle nor bone. It does not furnish energy for muscular nor brain work except in the sense that heat may be transformed into potential energy.

In large quantities alcohol retards the action of the gastric juice in the stomach and paralyzes the nerve centers. It deadens the sensibility to pain and fatigue. It affects the power of connected thought and judgment; it allays mental pain and worry. It seems to be the concensus of opinion that alcohol in small amounts may be beneficial, but in large amounts it is harmful. On account of the tendency to excessive use it is safer to abstain from habitual use even of limited quantities.

Doubtless one of the greatest boons to the health of the American people in the present generation is the immense production and consequent cheapness of fruits. It is less than thirty years since most fruits were a luxury beyond the reach of people with moderate means. In 1814 it is said that only a one-half bbl. of raisins could be found in the city of New York. Now the yearly production in California alone is 50,000 tons. Twenty years ago the strawberry season was limited to two or three weeks in early July and the total quantity consumed was produced within a few miles of the consumer. At present the season begins in November with the price at one dollar a quart for berries grown in Florida, and ends in the following August with the same price from berries grown in Nova Scotia and New Brunswick. In the height of the season every one can afford these berries at 6c. per quart.

In 1873 oranges were not commonly grown in the United States. During the first three months of the year 1900 in one county in California there were grown and shipped 1,000,000 boxes of oranges and lemons valued at \$4,000,000. The first Concord grape vine still producing at Concord, Mass., is the single ancestor of the immense vineyards producing untold quantities of grapes in Ohio and Wisconsin, in addition to the Catawba, Niagara and other varieties.

The extent of the apple crop of this country is almost beyond comprehension. In May, 1900, 500,000 bbls. of the crop of 1899 remained in cold storage waiting for high prices. The great expansion of the fruit industry is due to the development of cold storage and the use of refrigerator cars. One hundred and twenty dollars pays for a car from San Francisco to New York. It costs but two cents to transport a box of strawberries from Arkansas to New York at express speed. It is impossible to estimate the influence of this vast consumption of fruits on public health.

In his mental and moral nature as well as in his physical nature, man is closely concerned by the character of his foods. From the great variety at his command, it is within his power to select those forms that maintain his best physical condition.

In some respects it seems unfortunate that we are endowed with an appetite that affords us an especial pleasure in the indulgence in those forms of food that are not conducive to health. It is a constant struggle against excessive indulgence of this form of desire we call appetite which has its origin in the stomach. The craving for food at regular intervals is attended by the secretion of gastric juice in the stomach sufficient for digestion. If the supply of food is irregular, the secretion gradually diminishes until indigestion follows. As in so many directions in life cross purposes interfere with our legitimate demand for suitable foods. Our desire and necessity for foods is such that we are willing to pay liberally for the food materials we need. Here is an opportunity for that element of human nature called cupidity or by the phrenologists acquisitiveness. The dealer in foods says to himself if I mix a certain proportion of less valuable material even though harmful with the genuine food substance, and charge the same price, I shall gain a few dollars and cents. Thus arises adulteration of every form of food substance used in the home, unless it be prevented by rigid enforcement of legal restriction. In animate nature it is a question of opposing forces. The progressive elements in life are always preyed on by the parasites. Food adulteration has assumed large proportions. Statistics show that more than one half the income of the people of the United States is spent for food, food accessories, and drinks, and five to ten per cent. of the entire food supply is adulterated; at least ten per cent. of this adulteration is injurious to health. The greater proportion of injurious adulteration is due to the use of preservatives which is caused largely by a craving for food out of season and out of place; for summer fruit in winter, for oysters 1,000 miles inland, by the urban demand for fresh milk that for some eastern cities must be brought 100 miles or more, with delivery at least 36 hours after the milk leaves the farm. The preservatives in ordinary use are salicylic acid, boric acid and formalin. These substances are harmful when taken into the stomach. Alum is often used in baking powders and in bakeries for the manufacture of white, nice looking bread from inferior flour.

But the greater part of adulteration is in the nature of fraud. Flour is not usually adulterated, spices are almost always. But

perhaps corn or buckwheat is more wholesome than pure pepper, and rice is surely more wholesome than ginger, and starch than soda. While such forms of adulteration are frauds on the pocket-book, they may be blessings in disguise to the stomach. Glucose so frequently used in confectionery is not so sweet as cane sugar, but it is more easily digested in the stomach. Trade names deceive only the ignorant buyer. It is well understood that strictly pure means a certain per cent. of adulteration and that pure means with a certain greater addition.

The worst feature of food adulteration is the use of trade names and misleading labels which are intended to deceive consumers into thinking that they have something of value because it is described as novel, and attempt to satisfy the popular craving for something novel.

Within the last few years a class of predigested foods has appeared in the trade which includes a cereal preparation for almost every day in the year. These foods are intended to satisfy the popular craving and to stimulate jaded appetites already sated by endless variety and bad combinations. There need be no better commentary on the laziness or willful ignorance of the American people than to assume that grain can be changed in any form of machine so as to give it a greater food value than was in the original grain. It is not always best for a healthy person to have food which is too easily digested. It has been said by eminent authority that excessive use of predigested food by the wealthy classes may lead to universal debility of the intestinal muscular walls. A predigested food is quickly absorbed into the circulation and it may cause a sensation of fullness which soon passes away to be followed by faintness.

Before proceeding to the composition of foods, it may be interesting to review briefly the chemical changes connected with the circulation of the blood, and the generation of energy. The body is a true heating furnace requiring a wide range of fuel for a healthy condition, producing various forms of energy as a result of the continuous combustion, and evolving the same products CO_2 and H_2O , as are evolved in complete combustion in any furnace. The fuel is the digested food which is received by the blood largely from the liver, and carried to the minute capillaries near the surface of the body, where the final combustion takes place. As in ordinary forms of combustion accompanied by heat and light, the supporter of combustion is oxygen, which the blood re-

ceives from the lungs. As the blood leaves the heart, then, it is laden with oxygen and fuel; it rushes through the large arteries, which lie in safe positions under the large muscles beneath the surface. After the chemical changes have taken place near the surface, the blood laden with carbonic dioxide returns to the heart through the veins. The bright red arterial blood holds the oxygen in weak chemical union with the red corpuscles, the oxyhemoglobin. The blue venous blood carries back the carbonic dioxide and delivers it in the lung cavities whence it escapes in the exhaled breath. A complete circuit of the blood occupies only a small fraction of a minute. The greater part of the carbon taken into the system as food therefore escapes through the lungs. The water is in part exhaled in the breath, in part is given off in cutaneous exhalation and the remainder forms part of the excretory products. It must be a nice adjustment in which the digested food is transformed into such unstable bodies that are decomposed at a temperature far below that at which combustion can take place outside the body. The red corpuscles in the blood which are largely instrumental in bringing about these changes, are manufactured in the red substance of the bones and soon decay and pass out the system as a waste product. In this manner great energy is developed in the human system, and it must be utilized in some manner or the health will suffer. Like most of the fundamental processes that support animal life, eating to appease hunger is attended with an agreeable sensation, which is easily developed into an abnormal appetite, especially for those forms of foods that are injurious, at least when taken in immoderate quantities. Besides the energy that is expended in the form of heat, to maintain the operation of the bodily machine, the excess of the energy derived from food is utilized in the various physical and mental processes. The highest aim of life is evidently based on such temperate use of foods and such rational physical habits as shall conduce to the best mental development of the individual. The very common practice of eating freely of those forms of food that develop the greatest amount of energy with little or no exertion in exercise, and as is too frequently the case, with severe mental effort, may be compared to an attempt to dam a large stream of water. The dam must be raised higher and higher until it can no longer stand the strain and it breaks at the weakest point. The body is a machine, perfect and durable in all its mechanism and action. It is perfectly adapted to receive and utilize enormous energy. But it

must receive the same careful attention that is bestowed on any delicate mechanism that is subjected to severe strain. More and more, people are coming to understand and appreciate this equivalency between food energy and work in its relations to health. In our generation of good things, strong temptations to indulgence must be controlled to prevent serious consequences.

Foods may be classed as follows: Bread and the cereals, sugar, meats, fish, oils, milk products, vegetables.

The essential food constituents of these materials are grouped together as carbohydrates, fats and protein.

Carbohydrates include starch, cellulose, and the sugars—cane and beet sugar, glucose or grape sugar, levulose or fruit sugar.

The principal sources of starch are the following: Potatoes, rice, corn, wheat, sago, sorghum; liver starch is produced in the body.

Fats include fat meat, butter, fat from milk, vegetable fats, vegetable and animal oils.

The term protein is applied to the compounds of nitrogen contained in lean meat, albumen of eggs and milk, gelatine from bones, vegetable albumen, casein from milk, fish, meat extractives soluble in water, beet tea, and meat extracts.

The principal uses of food are two-fold; (1), to form the material of the body and to repair its wastes; (2), to furnish heat to keep the body warm, and to furnish muscular and mental power. In yielding heat food serves as fuel. In furnishing the tissues and fluids of the body it serves for building and repair. In this sense the body is a machine, but it is more than a machine, since it possesses a nervous organization, sensibility, and the higher intellectual and spiritual faculties, which can only be maintained in a healthful condition by proper nutrition.

The starches and sugars and fats such as fat meat serve as fuel to supply bodily heat and to generate power. An excess is stored up as fat to be used when needed. The body has the power to transform the carbohydrates, the sugars and starches into fat.

The proteids, including the albumen of egg, lean meat, casein of milk, etc., are transformed into the albuminoids and gelatinoids of the body to form bone and muscle; they are sometimes called the flesh formers. The different nutrients can do one another's work to a certain extent. If there be not enough carbohydrates nor fats for fuel, the proteids may be used for this purpose; the fats and carbohydrates cannot take the place of the proteids in forming and repairing tissue. This distinctive adapta-

tion of the proteids depends on the peculiar properties of the unstable element nitrogen, when in combination, which is not present in other food substances. The starches and sugars in being consumed themselves protect the albuminoids from consumption. When they are exhausted, the albuminoids are consumed for fuel. It is like the situation of an individual who has exhausted his supply of household fuel. To keep himself from freezing he will burn his household furniture and goods.

The heat of the chemical reactions involved in oxydizing the carbohydrates and fats into water and carbonic dioxide is sufficient to maintain the bodily temperature at 98 F., and this temperature is sufficiently high to support all the chemical changes involved in keeping the bodily functions in a perfectly healthy condition. But these changes demand a constant renewal and consequent consumption of the materials which compose the body. This consumption requires vigorous work and activity of all parts of the bodily functions. In a perfectly quiet condition, there is less consumption, consequently less renewal required, less vigorous chemical reactions, and less bodily heat. The bodily heat is nicely adjusted to the temperature of its environment. At summer temperatures very little clothing is necessary for comfort; in winter temperatures, especially without vigorous exercise, heavy clothing is necessary; with sufficient exercise the heavy clothing may be discarded. The statement that the business man after the age of thirty-five needs no bodily exercise is wrong. While brain work is exercise of a certain sort, it is not the kind that keeps the bodily functions in their best condition. It is the experience of every healthy man that he can accomplish greater mental effort with less fatigue when his muscular system is in proper condition. It cannot be doubted that a healthy condition demands less artificial heat, and more vigorous exercise than the average person takes. This adjustment of the bodily heat enables man to withstand a temperature of 120 degrees at the equator and 70 degrees below zero at the arctic regions or in certain sections in Russia where the earth never thaws completely. It is estimated that only about one-third of the total energy contained in the daily food is available as kinetic energy or external work, the other two-thirds is used up in internal work of the body, the action of the heart and lungs, and the production of the great amount of heat necessary to life.

The grains used in the manufacture of bread are the following: wheat, oats, maize, rye, rice. "Black bread" made from rye is still consumed in Germany and the north of Europe.

Formerly all these grains were made into bread; but more and more the single grain for bread has been wheat, until all the burden of the world's supply of bread is now borne by the wheat fields. Statistics show that one short crop in all fields would cause a bread famine.

Milk is often mentioned as a perfect food. In the sense that it contains carbohydrates, fat, and protein in the form of casein, it may be accepted as a complete food. Whole milk contains on the average four per cent. protein, five per cent. fat, and four per cent. of sugar held in solution and suspension in a small amount of albumen, and 87 per cent. water. A very large amount of water must be taken care of by the system in securing what it needs for food from milk. Then the casein cannot be easily and readily digested by all persons.

One pound of butter containing 82.4 per cent. of butter fat has a high fuel value, but it is not a flesh former; it has no greater nourishment than the same weight of other fats, such as mutton, pork, olive oil, or other oils. But it is more easily digestible, and is a source of supply of fat for persons who cannot digest other fats, such as pork fat. Butter fat has a more agreeable taste than other fats on account of the fat ethers which the butter contains.

Cheese is concentrated milk in all but the sugar. It is estimated that one pound of cheese in flesh formers is equal to eight pounds of milk; but in fuel value it is equal to but six pounds of milk. Cheese is a very nutritious form of food; it is more easily digestible when cooked. It should be eaten more. Experiments are in progress which promise a method for making cheese which will render it more easily digestible. Skim milk cheese is as nutritious as that from whole milk except in fat. One pound of fat in milk is worth 15-30 cents, according to locality and season. The same weight of fat may be obtained much more cheaply from the other sources mentioned. It is sometimes said that one egg is the equivalent of one pound of beef; but really one pound of beef is the equivalent of 7 or 8 eggs; and one quart of whole milk is the equivalent of 8 or 9 eggs.

Five pounds of skim milk, two and a half quarts, in fuel value is equal to one pound of round steak; the milk costs one cent, the beef costs 12 to 14 cents. Two quarts of skim milk has a greater fuel value than one quart of oysters; in flesh formers, the skim milk gives 630 calories of heat energy, the oysters 470

calories. The nutriment in the oyster costs 30-40 cents; that in the milk costs 2-3 cents.

An oyster stew composed of one part oysters and two parts skim milk would owe its nutriment more to the milk than to the oysters. Bread made of skim milk is far more nutritious than that made of water. A luncheon of bread and skim milk is very nutritious but not generally appreciated.

When we attempt to extend our knowledge of the constituents of foods to which I have alluded as proteids or albuminoids, we approach more closely the hidden mysteries of life. These bodies are exceedingly complex in their structure, and except the ultimate products of the chemical changes through which they pass in the body, we know very little about them. The changeable element nitrogen is chiefly responsible for their complexity, instability, and the wonderful changes through which they pass in sustaining the delicate and mysterious transformations most intimately associated with the phenomena of animal life.

The chief products of the decomposition of these bodies is urea, which escapes from the human body at the rate of one ounce in 24 hours. These bodies are not formed from simple material within the animal body, but are derived solely from plants and undergo such changes as are necessary to adapt them to vital process. In the growth of plant life the proteids are formed from the nitrogen and carbonic acid in the air, and moisture. These bodies are composed of a few elements, carbon, hydrogen, nitrogen and oxygen, with a little sulphur in the albumens, and a little phosphorus in the nuclein, etc., in the brain, but they are very complex in their composition. Albumen of egg, for example, has received the formula $C_{72}, H_{112}, N_{18}, SO_{22}$. The sources from which we obtain our proteids are milk, eggs, lean meat, some vegetables. As a rule those from the animal kingdom are more easily digested than those from the vegetable kingdom. This depends largely on the fact that in vegetables the proteids are mixed with large quantities of starch, cellulose, etc., which must be worked over and over before the proteid can be separated; for instance, potatoes or wheat flour, thus entailing a great amount of work on the digestive organs. It is far more economical, therefore, to depend on animal food for the proteids. A purely vegetable diet is evidently not reasonable nor desirable. Too great sameness may impair the digestion. The appetite craves a variety in foods and on physiological grounds the system demands it.

The prophylactic value of food depends on its power to keep the human body in its best condition of health. It depends on a suitable proportion of proteid, fat and carbohydrate, and the foods properly prepared by mechanical means and by cooking for the processes of digestion. In order to keep the human machine in proper condition for either physical or mental effort, in our climate and for the habits of our people the following proportion has been suggested (Mrs. Richards):

Proteid	Fat	Carbohydrate	Calories
75 grms.	40 grms.	325 grms.	2,000

The term calorie defines the quantity of heat that is necessary to raise the temperature of one pound of water 4 degrees F., and it is the unit of measurement for the heat energy for each pound of food substance. One pound of protein burned in a calorimeter produced 1,860 calories of heat; one pound of fat, 4,220 calories, and one pound of carbohydrates 1,860 calories. Therefore the heat value of fats is two and one-quarter times that of the carbohydrates.

The dietary proportion given above, and the quantity of heat energy, 2,000 calories, are intended to represent what is necessary to keep the average human system in a condition of health without the performance of work, either physical or mental. An examination of twelve dietaries of the very poor, who eat just enough to live without work, was shown by Mrs. Richards to have an average of 81 gm. protein and 2,257 calories. For a maximum work ration 125 grms. protein and 3,500 calories, and for a minimum work ration 110 grms. protein and 3,000 calories were suggested.

It is evident that any of these estimates must be accepted as averages, and must vary considerably with age, size, sex and occupation, climate and peculiarities, temperament, and habits of the individual.

The German standard, Voit's, for a man in moderately hard muscular work, is 0.25 pounds of protein and 3,000 calories. Taking into account the more active life of our own people, and that people here eat more, Atwater suggests as a standard 0.28 pounds of protein and 3,500 calories.

Just what compounds in foods are needed for the nutriment of the brain physiological chemistry has not yet ascertained; but it is certain that people with little muscular labor require less food than those who labor. Professional men and students in Germany have been found to be well nourished on 0.23 pounds

protein and 2,700 calories of energy. The amounts eaten by professional men in the United States have been found to be larger.

The following table, compiled by Mrs. Richards, represents what is termed the work ration for a professional or a literary man in this country:*

TABLE No. I.

WORK RATION FOR A PROFESSIONAL OR A LITERARY MAN.

	Oz.	Protoid Grms.	Fat Grms.	Carbo- hydrate Grms.	Calories.
Bread	16	32	3	258	1,216.6
Meat	16	50	30	.....	481
Butter.....	1	.....	25	.....	230
Sugar.....	4	.....	.....	110	451
Milk.....	8	18	18	22	329.6
Oysters	4	7	1	.....	37.8
Soup.....	4	4	3	.....	44
Potatoes.....	6	3	.....	38	168.1
Eggs	3	10	9	.....	123.8
Oatmeal.....	2	1	0.5	4	25.1
Cream.....	1	1.5	6.5	1	70.1
Fruit	8	0.5	.....	50	207.1
Add. Liquid, Tea, Coffee or Water.....	30	.....	.....	.....	.....
Total		127	96	483	3,384.2

Convinced by observation that the quantities of food in the above ration are in excess of what is required by many individuals with similar occupations, I suggested a series of experiments extending through five days, by four persons. The results are given in Table No. II: Ration 1 is that of a healthy man, weight 185 pounds, very actively occupied. Ration No. 2 is that of a healthy man, weight 145 pounds, actively occupied. Ration No. 3 is that of a healthy woman, weight 118 pounds, actively occupied. Ration No. 4 is that of a healthy woman, also actively occupied, weight 114 pounds.

The method employed consisted in weighing each portion of cooked food or uncooked food just before it was eaten, taking

*For much of the facts and data contained in this paper, I am indebted to the publications of Professor Ellen H. Richards and to the Government bulletins, issued under the direction of Professor Atwater, which contain a vast amount of valuable information concerning foods and food values.

TABLE No. II.

	OUNCES.				PROTEIDS GRMS.				FATS GRMS.				CARBOHYDRATES GRMS.				CALORIES.			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Bread.....	10.2	5	3.2	6.5	22	16	6	11	4	2	1	3	196	97	62	114	852	455	288	565
Meat.....	6.7	1.9	.8	2.8	40	11	17	14	32	3	15	4					500	138	155	210
Egg.....	2.4	.4	1.5	.4	10	2	7	2	10	12	4	11					38	24	96	24
Wheat.....	1.5	1.3	2	.5	5	6	7	2	5	4	7	2	36	28	48	12	206	160	272	68
Oatmeal.....	.5	2.5			2	3			1	2			10	15			70	105		
Milk and Cream.....	1.3	8.8	2.8	4.3	3	10	7	6	3	.37	7	22	3	19	10	10	53	359	131	262
Vegetables.....	5.5	4.3	1.3	3.8	11	3	8	2	.6	.5	.8	.5	68	23	7	21	300	101	67	74
Fruit.....	15.8	5.6	10	2.3	8	1	6	5					56	36	65	15	396	148	284	62
Sugar.....	.5	2.7	.4	2.2									14	73	12	62	56	298	48	255
Butter.....	.6	.7	.3	.6					15	18	8	14	1	1		.5	135	162	72	126
Soup.....	11.5	2.8	8.2	2.7	12	5	8	5	9	2	6	2					129	42	86	34
Beans.....	1	2		.9	7	14	6		.6	1		.6	17	36	18		108	216	100	
Total.....	56	3.5	35	27	111	63	83	53	79	80	52	59	414	304	256	253	2665	2065	1820	1780

the amounts ordinarily selected by each person. Probably the food values after cooking were somewhat different from those of the same foods before cooking; but in most cases the same values were used in calculations that are the basis of Table I, given above.

It is not claimed that these results, as they appear in the table, represent the utmost scientific precision; but they are sufficiently accurate for intelligent comparison.

The great lesson to be drawn from any dietary ration is based on the proportion of protein to the sum of fats and carbohydrates, which determines the ration, whether it be a narrow or a wide ration. This relation is ascertained by multiplying the weight of fats by $2\frac{1}{4}$, adding the product to the weight of carbohydrates, and dividing the sum by the weight of protein.

The ration most generally accepted as normal is 1:5 or $5\frac{1}{2}$. A ratio 1:4 or $4\frac{1}{2}$ is a narrow ration, that is, it contains too large a proportion of nitrogenous or proteid food to the sum of fats and carbohydrates. A ratio 1:7 is a wide ration, and shows that it contains too much fats and carbohydrates in proportion to the weight of protein. A suitable proportion of food constituents represented by the ratio 1:5 or $5\frac{1}{2}$ defines the food supply that every person must have to keep himself in the best condition of health and to accomplish his best work.

Any discussion of food values and suitable food rations is usually met by some such remark as this: "After all every person must be a guide to himself as to what he can and cannot eat." It is quite true that individuals differ as to their digestive capacity. Some persons can digest sufficient milk to form the entire diet, although such a diet is deficient in carbohydrates. Others find that the precipitation of such large quantities of casein in the stomach clogs the digestive functions. Some persons make eggs a large proportion of their proteid food; others find themselves in a serious bilious condition after eating too freely of eggs. Some persons get their supply of fat from pork; others who cannot digest pork fat rely on the more easily digestible butter fat. Some persons are obliged to discriminate in the kinds of fruit they eat. Hence, while every person must have a proper proportion of protein, fat, and carbohydrate, he must ascertain and decide for himself what shall be the source of each food constituent, depending on his particular digestive power.

Referring again to table No. 2, it will be seen that ration No. 1 has the nutritive ratio 1:5.3; ration No. 2 has the ratio

1:7.7; ration No. 3 has the ratio 1:4.5, and that ration No. 4 has the ratio 1:7.3.

Ration No. 1 is well balanced. Rations Nos. 2 and 4 are too wide; that is, they contain too little protein. Ration No. 3 is too narrow; it contains too much protein in proportion to fat and carbohydrates.

The importance of cooking foods properly depends on making them palatable as well as digestible. Digestion depends on the harmonious working of closely allied processes.

Foods must be palatable to cause through the pleasurable sense of taste a copious outflow of the digestive juices, and the more palatable the food the more thorough will be the mastication. The mechanical subdivision is also aided by thorough cooking, which also enables the digestive juices to come into more intimate contact with the food substance. Cooking, furthermore, disintegrates and softens the tissue fibers which hold together the muscular tissue by converting them into collagen into gelatine, which is easily digestible. By boiling, roasting, or broiling meats, the proteid or albuminous matter is more or less coagulated, which imparts a fine flavor without interfering with the ease of digestion. Raw beef when finely divided by chopping is somewhat more easily digestible; that is, it is more readily dissolved by the gastric juice than when coagulated by cooking. But altogether cooking aids digestion, and furthermore it causes the destruction of disease germs. The most important, if indirect, effect of cooking is to impart necessary palatability, which stimulates the secretory processes. Palatability and digestibility, therefore, go hand in hand, and the intelligent preparation of a so-called cheap or tough piece of meat may result in as digestible and nutritive product as more careless preparation of a "flat-bone" sirloin.

But with all the aid that scientific study of food can give in its relations to the human system, and with all possible care in its selection and preparation, after all the question of health, so far as it depends on digestion and assimilation of food, is mainly one of personal habit and feeling. The first requisite for success in life, it has been said, is to be a first-class animal. The brain gets a good deal of credit that really belongs to the stomach. It has been truly said that we can earn our daily bread but we cannot digest it. Dyspepsia is often the beginning of serious malady. It is one of the first results of hurry. Thousands of men in cities eat their daily luncheon standing at counters. In a great

hurry they bolt their food in the shortest possible time and hasten away to business.

The digestible value of proteid foods depends much on the manner in which the muscle fibers are bound together, because this determines the mechanical subdivision on reaching the stomach. Such meats as the breast of young chicken, and the flaky muscle of fish, short and delicate, are more digestible than the long and coarser fibres of tougher meats, because they break apart more easily and expose more surface to the action of the digestive fluids. In general, it may be said that lean meats are more digestible than fat meats. A hard fat, as in mutton, tends to retard digestion of the meat more than the softer fat, as in beef. So in fish, in shad, for instance, the white meat in its greater freedom from fat is nearly 10 per cent. more digestible than the dark and fatter meat.

The cost of food is the principal part of the living expenses of most people. Some years ago it was shown by the Massachusetts Board of Statistics that the cost of living of people with different incomes in Massachusetts, Great Britain and Germany were as follows:

	Germany.	Great Britain.	Mass.
Workingman	62%	51%	64%
Intermediate Class	55%		60%
In Easy Circumstances	50%		51%

A large majority of the families in this country are said to have not more than \$500 a year to live on. More than half of this sum goes for food. Although health and strength depends directly on the diet, and the cost of food makes such a large part of the cost of living, very few even of the most intelligent people understand as well the actual values and proper uses of food as of the other necessities of life.

The cheapest food is that which supplies the most nutriment for the least money. The most economical food is the cheapest and at the same time best adapted to the wants of the eater. The maxim that the best is the cheapest does not apply to food. The most healthful and the most economical food is not always that which is the finest in appearance and flavor. The laborer who spent \$150 a year for the best quality of meat, \$100 a year for clothing for a family of nine, and \$72 a year for rent, committed a great economic blunder, since less expensive food, just as nutritious, such as comes regularly on the tables of men of wealth, is just as wholesome and just as good, save the pride and palate.

Twenty-five cents spent for sirloin of beef at 22 cents a pound pays for three-eighths of a pound of nutritive material, that contains one-sixth of a pound of protein and one-fifth of a pound of fat, and supplies 1,120 calories of energy.

The same sum paid for oysters at 50 cents a quart buys two ounces of nutritive material, one ounce of protein and 280 calories of energy.

With wheat flour at \$7 per barrel, 25 cents pays for $6\frac{1}{4}$ pounds of nutrients with 8-10 of one pound of protein and 11,785 calories.

Animal foods are more easily and more completely digested than vegetable. People the world over will have animal foods, and doubtless there is good reason for paying more for the nutritive material which they contain. Persons in good health are perhaps justified in buying foods in which the nutrients are the most expensive, but they are not economical. Food is wasted in two ways; much is thrown away, and most people eat more than they need.

There is much truth in the saying that the average American family wastes as much food as a French family would live upon. The amount of food wasted in some of the most economical families is very large and in some it is enormous. It is not economical to try to make up for lack of skillful cooking and tasteful serving at home by paying extravagant prices in the market.

The simple remedy for extravagance in food depends on a better understanding of elementary facts concerning food and nutrition, and acceptance of the doctrine that economy is honorable as well as respectable.

With reference to the effects of food on health, the American people eat too little protein and too much starch, sugar and fat. The quantities of fat in European dietaries range from one to five ounces daily, while in the American dietaries it ranges from four to sixteen ounces daily. The well-to-do German professional man eats from three to four and one-half ounces a day, while the same class American eats from five to seven ounces a day. The quantities of carbohydrates, starch, sugar, etc., in the German dietaries range from nine to fourteen ounces, but in the American dietaries the carbohydrates range from 24 to 60 ounces. Physicians tell us that the harm from our one-sided diet is very great. An eminent physician and authority in England says:

"I have come to the conclusion that more than half of the disease which embitters the middle and latter half of life is due

to avoidable errors in diet, and that more mischief in the form of actual disease of impaired vigor and of shortened life accrues to civilized man, in England, and throughout central Europe, from erroneous habits of eating than from the habitual use of alcoholic drink, considerable as I know that evil to be."

In the present state of knowledge of foods, food materials and substances that compose the animal and vegetable kingdoms, as well as of the various changes through which these bodies pass from the time they begin their formation from the elements of air, water and mineral salts until these bodies are resolved again into the elements from which they came, with a few exceptions, the chemist has fairly good information. But there are certain deep and impenetrable chasms that have never been bridged over and may never be. Although the sugars are evolved naturally and commercially with the greatest ease from starch, and the composition of the sugars is so well known that they may be made in the laboratory, yet starch still resists all attempts toward further knowledge of its structure. From the close relation of starch to the process of vegetable growth it has an especial interest. But the great and as yet unfathomable abyss is that of the proteids and the nature of vegetable and animal protoplasm. Some eminent authorities are of the opinion that we may expect any day discoveries that shall lead to as complete knowledge of these bodies and consequently of life processes as we have of other closely allied phenomena. When we consider that urea, the principal product of the breaking down of the proteids, was the first substance of animal origin to be made synthetically in the laboratory in 1828 by the great German chemist Woehler, and that nearly every body of vegetable and animal origin may now be made synthetically in the laboratory and that some of the most important lines of industrial chemistry are based in the manufacture of such bodies, it is idle to speculate on the possibilities of the future.

The stomach is the seat of health. Sidney Smith said: "Some men dig their graves with their teeth."

Heart disease and apoplexy, and the causes of death which may be grouped under those heads, usually result from overtaxing the brain and maltreating the stomach and general system. Many instances constantly come under our observation. The late Gov. Greenhalge and ex-Gov. Russell, of Massachusetts; Gen. Walker, late president of the Massachusetts Institute of Technology; the eminent chemist, Prof. V. Meyer, of Heidelberg,

Germany, are recent notable instances, and we can recall many others. Overwork, lack of exercise, and constant worry are the chief causes of sudden death. Worry retards digestion, and interferes with the normal action of the heart. It tears down nature's natural defences against insidious attacks of disease. Dr. E. E. Hale says that some people have three kinds of trouble: all they ever had, all they now have, and all they ever expect to have.

The man who would live long must follow the advice of Pope:

"For every evil under the sun
There is a remedy, or there is none.
If there be one, try and find it;
If there be none, never mind it."

Worry means death; cheerfulness means life. Sidney Smith knew the meaning of cheerfulness when he wrote: "I have gout, asthma and seven other maladies, but am otherwise very well."

It is said that Gladstone in his busiest days slept soundly and never worried. Laughter and amusement are medicines that every overworked man needs, but in which many never indulge. Longevity is the result of plenty of sleep, plenty of exercise, and a wise regulation of the diet. The man of affairs needs more recreation, more exercise, more amusement. Hearty, genuine, irresistible laughter is most refreshing to the tired mind and of more value in restoring the healthy poise than any drug or medicine. It reacts on the heart and liver, the lung and the stomach, sending the blood vigorously throughout the system; it imparts a healthy tone to the entire body. The delicate adjustment of the system so easily disturbed by a sleepless night of anxiety is often restored by a hearty laugh.

The present age is experimental in many respects. New conditions of occupation and of living have evolved so suddenly that there has been little time to observe the consequences. The marvelous unfolding of the world's resources within the last decade has brought into action a display of human energy and executive ability that is without precedent in the world's history. Great financial operations involving expenditures of millions of dollars are as calmly undertaken now as those depending on the investment of thousands, a few years ago. But an insight into the methods of any one of these great operations discloses a perfect system working in harmony with the direction of a master mind that controls every detail. What is to be the result of this

great strain on the directing human engine and on his descendants it is not yet time to discover. He has as a foundation the sturdy constitution bequeathed by his rugged ancestors. Will the best care that he can take of himself be sufficient to maintain the vital forces for later generations? However this may be, it is certain that the human machine under these conditions must receive the very best care with reference to intelligent selection of food materials, recreation, exercise and full hours of sleep, or it will succumb. But with the digestive functions in good condition, a cheerful temper, and 7-9 hours of sleep, and with careful exertion of his power, it has been demonstrated that there is almost no limit to what man may accomplish.

CASES OF PROLONGED FEVER NOT TYPHOID.*

BY J. PARK WEST, M. D., BELLAIRE, OHIO.

No other subject has received near the attention in this Society that typhoid fever has, but unfortunately our discussions soon run down to treatment and on this we spend our time, and while the occasional conversion of a member to the use of the tub-bath would seem to repay for this, there are other phases of the subject that are just as important that should receive a larger share of our attention. Today I have so little to say of treatment, not only because treatment availed so little in the cases to be reported, that it is hoped it will be passed over with as little attention as the paper gives it. That the classification of fevers is not completed is recognized by all. That many cases of continued fever called typhoid are not typhoid fever is patent to any one who observes at all closely.

This past summer and fall I have seen an unusual number of cases, fifteen, of a continued fever that could not be reconciled with the diagnosis of typhoid fever, nor very closely with any description of a continued fever found in text-books or journals. These cases more nearly resembled that form of malaria known as *æstivo-autumnal* fever, but reasons will be given later for believing they were not malarial. I do not mean to say these cases were something new or presented any new features, for I have seen similar cases before, probably from two to five in the late summer and fall, but this number, fifteen, in the course of four months is very unusual.

* Read before the Belmont County Medical Society, Dec. 27th, 1900.

Case I. The following case is fairly typical. Mrs. D. L., forty-one years old; married; one child, ten years old. Has lived in Bellaire three months. Formerly lived ten miles west. Fairly healthy, though not robust. Has nervous headaches. On Oct. 9th was taken sick with a headache and was first seen by me on the 13th. Her complaints were of a severe pain over forehead and right temple, and of weakness. Her temperature was 101 2-5 degrees F. No chills. On the 16th she was seen again. No pain in head or elsewhere. Very weak. No appetite. Very costive. Tongue broad and whitish coated. Sitting up. On the 17th she was reported better. Two days later she was seen again and on this day had had to go to bed. No pain nor unpleasant feelings,

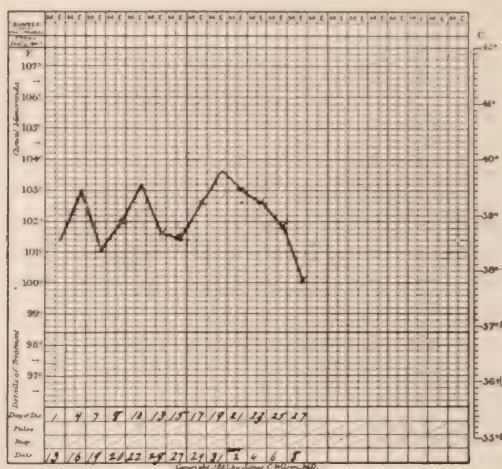


Chart showing temperature curve in Case I.

only weakness and depression. Tongue as before. Abdomen flat and dull. No eruption. Liver and spleen normal. There was no gurgling. Bowels very costive and remained so throughout her whole illness, requiring a cathartic every other day. From four to six times a day there was a slight hacking cough, but never any expectoration. At every visit she expressed herself as feeling very well and without ache or pain; she felt too weak to get up and was contented to lie in bed. Twice only there was slight tenderness on pressure just above the umbilicus. She felt no worse when the fever was high than when it was low, and her pulse varied but little and never corresponded with the fluctuations of the temperature. Her condition varied but little from visit to visit and a careful examination at each only revealed what

has been stated. Here is a record of her temperature, and I might say now it was usually taken, in all the cases, in the after part of the day and always in the mouth, except in the youngest patient it was taken in the rectum.

Case II. This case is given because of a better temperature and pulse record, although not so typical as some others, having been complicated with bronchitis. M. H., merchant, thirty-three years old. Exceptionally healthy and temperate. On Sept. 8th he had a cough and two days later was seen by a physician, who told him he had fever; the fever kept up just one week according to this physician. On the 19th, not feeling entirely well, he saw another physician and was told he had a mild gastritis. He

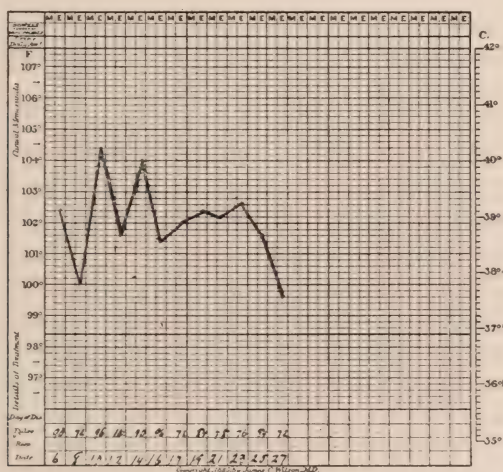


Chart showing temperature curve and pulse rate in Case II.

saw this physician again on the 25th, when he was about over the gastritis. His temperature was taken and found to be normal. I saw him Oct. 6th, after he had been sick a month. He complained of weakness, lack of energy, a poor appetite, constipation, and a cough that was troublesome only at times. He had been feeling this way for a week, but had been up and about the house and was surprised to learn he had a temperature of 102 2-5 degrees. He had a resigned, tired look. His tongue was broad and irregularly covered with a whitish, pasty coating; the edges were rough. His belly was not full nor was it tender, except slightly so on deep pressure in the epigastrium down to the umbilicus. Pressure did not cause any gurgling. The spleen and liver could not be felt and percussion showed no enlargement. There was no

eruption any place. There was a mild bronchitis. The heart was normal, as was also the urine. During my attendance he had occasionally for a short time a dull, heavy feeling in his head, but never a pronounced headache. His appetite was always poor. Twice he vomited, after eating, and on three or four different days had some nausea and eructations of gas. On the 10th and 13th he had slight chilly feelings in the mornings. On a number of mornings, before getting up, he sweat freely; twice this occurred on successive mornings, while at other times one, two and three days intervened. His bowels were costive and throughout his illness he took a morning dose of one to two drams of phosphate of soda, and until it acted there was some rumbling, but rarely any at other times. He slept well except when disturbed by the cough, which was more troublesome at night. After the 18th he remained in bed, hoping thereby to shorten the duration of his illness, but at no time did inclination or necessity compel him to stay there. This chart shows a record of his temperature taken in the mouth every other day about 5 p. m. It ran on in an irregular way for three weeks with but little change in his feelings or symptoms. After the end of the fever he convalesced very slowly.

Before contrasting these cases with typhoid fever the following quotation from a paper written by Elisha Bartlett in 1842, and made use of by Dr. Osler in a recent discussion, is in place: "There is no one symptom, there are no two or three symptoms, which, in themselves, are characteristic of the disease. There is no one symptom, there are no two or three symptoms, usually occurring in the disease, which may not be absent during its entire progress." A number of years ago I observed an undoubted case of typhoid fever that did not have any elevation of temperature. It is a well known fact that any continuous fever of a few days duration will be called typhoid by not a few individuals, particularly if the cause of the fever is not plainly evident. I make this quotation and state these facts so that in the discussion it is hoped this paper will excite we will not lay too much stress on one or two symptoms, and that we will remember that typhoid fever is a well defined disease and that to make a diagnosis we must have present at least a fair representation of the recognized symptoms.

The youngest of the fifteen cases was three years; the oldest forty-one. The average duration of the fever was about twenty-five days; one case lasted fifteen days, another (the longest) six

and one-half weeks. They did not have the dull, don't-care appearance of the typhoid, but all looked anxious or worried and the mind was clear and active. Only three of them were ill enough to feel they should be in bed. Two thought they could shorten their illness by staying in bed. One man, who had fever for more than five weeks, protested against going to bed, and, in fact, was not in bed a whole day during the time, because he did not feel sick; he was only a little weak and had no appetite. In fact the absence of symptoms and signs was the chief characteristic of each case. Outside of elevation of temperature, complete anorexia and weakness, there were no symptoms. Not once was a dry tongue seen; it was always moist, broad, in some indented on the edges, covered, particularly in patches, with a whitish, pasty coating, and was very slow to clean. Not one had a distended or tympanitic abdomen and in most the abdomen was retracted. Gurgling was heard in three; in two of these it was seldom and slight; in the other only between the time he took his dose of phosphate of soda and when his bowels moved. Some abdominal pain was complained of in eleven and tenderness was elicited by palpation in all. This was always within two and one-half inches of the umbilicus, sometimes above or below, or on either side and seldom in the same location on different days. It might be present at one visit, gone the next, and present or absent again. Mild diarrhoea was present in two cases, severe in one, the youngest patient. Careful search was made at almost every visit for enlarged spleen and for rose spots and neither were ever found. The only eruption present was sudamina in four or five cases. There was no delirium in any case and sleep was very little disturbed in any way. Slight headache of short duration was mentioned by two—severe or continuous headache by none. The temperature was very irregular and when it was highest the patients felt no worse than when it was lower. The pulse-rate and temperature seldom corresponded. There was no regular time in the twenty-four hours when the patient felt worse, but each hour and each day was about the same as the preceding. The convalescence was very slow in all.

The case of Jesse Philips, who was first sick with this fever and later with typhoid fever, is one of considerable interest. He was a healthy young man, a railroader, twenty-one years old. He first came to my office on Sept. 15th, complaining of malaise and inability to work for one week. After two or three visits to the office he was advised to stay home, where he was seen twice.

No symptoms except those mentioned in the other cases developed. On the 28th he was dismissed. On Oct. 2nd he walked out, probably a dozen squares, and went home very tired. At night he felt worse and his bowels were loose. The next morning he took a dram of phosphate of soda, as he had when first sick, and for several days he had a severe diarrhœa. He developed a well-marked case of typhoid fever and the difference between this sickness and the former one was very plain to him and to his parents, the nurses. His temperature was more regular and continued from Oct. 3rd to Nov. 6th. He had rose spots, diarrhœa, full abdomen; dry tongue and all the classical symptoms except the severe nervous ones. About the fifth day of this typhoid fever his spleen could be felt and it enlarged for four days, and it was not enlarged during the first attack.

That form of malaria known as *æstivo-autumnal fever* (often formerly called bilious, remittent, or bilious-remittent fever) often resembles typhoid fever, and it may be my cases were actually cases of this disease although I doubt it. A blood examination was made in but two cases and nothing found, though but little weight should be given to this statement. Malaria in any form is an unusual disease here, but is probably on the increase. In my eighteen years residence I've only seen one typical case that developed here, and that one a tertian in an adult. Very rarely have I seen any malarial symptoms in the adult; occasionally in children recovering from some acute illness there has been manifestations of the disease. This has been shown by convalescence being interrupted by an indefinite something neither the nurse nor patient could explain, but it would soon be noticed that one day the child was better and the next worse, and then a few doses of quinine would complete the recovery. If the cases described in this paper are of the *æstivo-autumnal* type of malaria, they seem to differ from those described as occurring at other places. It is well known that not unfrequently this disease gives a continuous, irregular fever that yields but little to quinine, particularly if the quinine is not given early. The last cases had quinine in doses sufficient to cause ringing in the ears and deafness, but neither the disease nor temperature showed any effect of the remedy. Some had it in one or two large daily doses, and others took it in smaller doses every three hours. Three cases had chills. One mentioned had two very slight ones on succeed-mornings. Another had from one to three chills every day at irregular intervals during the sixteen days of my attendance and

this had been his history for the two weeks previous while under the care of another physician. Another, a boy nine years old, had a chill, probably from exposure, just one week before any other symptoms came on. Three cases had sweats. One had sweating on six mornings irregularly, at one time three days intervening. Another case, a telegraph operator, twenty-seven years old, sweat twelve out of the twenty-four hours during his whole six and a half weeks of fever. The case mentioned before as having from one to three chills daily sweat a great deal, but the chills and sweats were independent of each other. As previously mentioned there was no enlargement of the spleen. The same can be said of the liver. In no case was there any serious symptoms, the temperature went down slowly, and recovery was slow.

The following case (one of two) has made me more doubtful of any malarial element. This boy's convalescence from the fever I have described was interrupted by malarial symptoms that yielded promptly to quinine. Quinine had no effect on the first sickness.

Case III. Harry Shempf, nine years old. Had but lately quit coughing from whooping-cough that began in June. A week before taking sick he had a chill while standing on the street waiting for a car. He did not complain until Thursday, Nov. 5th, but in the meantime had not looked well. On this day, while at school, he had a slight chill, and later his legs hurt. On Friday another light chill with head and legs aching. Saturday he lay around all day, but made no complaints. He had been very costive and his mother had dosed him with castor oil. On Sunday, when my first visit was made, he had a headache and soreness in the abdomen which was tender to pressure all over. The abdomen was not full or tympanitic and there was no gurgling. Temperature 102 3-5 deg. His tongue was moist and covered with a pasty, whitish coating and this was the condition during most of his illness. He was still costive and was ordered a dose of sulphate of magnesia, after which his bowels were loose, having from one to three passages daily. The headache disappeared on the third day and did not return. The abdomen remained flat, in fact rather retracted, during the whole illness. The general tenderness disappeared in a few days and at times afterwards there was some hurting and occasionally tenderness in the umbilical region. Rarely a little rumbling, but never on pressure. An eruption was looked for at each visit, but none was found. Careful examination was also made at each visit for an enlarged

spleen, but no enlargement was ever made out. There was no cough. Part of the time there was herpes labialis and aphthous stomatitis. He was quite weak most of the time and his appetite was slow in returning. His pulse was weak, but corresponded more closely to the temperature than any other of the cases. He slept only fairly well, was never delirious, and his mind active. On the 16th there was considerable sudamina on his belly and chest. He was dismissed on the 19th and on the afternoon of the 22nd he had a chill followed by fever, weakness and depression, when he was given three grains of quinine every three hours for eight doses. On the 23rd he felt quite well again and was up. On the afternoon of the 24th a light chill and fever, not

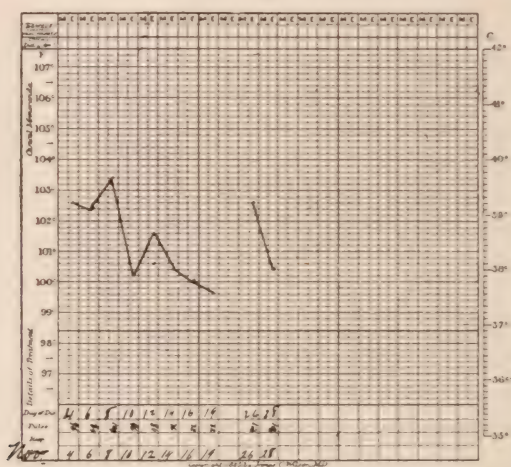


Chart showing temperature curve and pulse rate in Case III.

severe enough to require him to go to bed. On the 25th quite well. On the 26th a severer chill with higher fever and more pronounced depression. He was seen again and the temperature found to be 102 3-5 deg. with beginning sweating that did not become profuse. Quinine was again given and kept up until there were no more chills or fever. On the 27th he was lively and felt well. On the 28th another light chill with a temperature of 100 2-5 deg. After this day his convalescence was slow and uneventful.

Another similar case, a detailed history of which need not be given, was seen in a boy of eleven years.

Probably simple continued fever should be mentioned in connection with these cases. The length of the disease, two to

six and a half weeks, would seem to rule this out, as would also the fact that there was no sudden nor even quick fall in the temperature nor ending of any of the cases. All pain and discomfort were soon at an end and the convalescence was very tedious. There was no look of suffering, no suffering compelling one to keep his bed, and depression was pronounced during all the illness.

In this entirely clinical paper I have attempted to convey to you just what these cases were like. I do not think they were typhoid, and I doubt if they were malaria. Every one of these cases I have seen for years has been of much interest and I have never felt satisfied as to the nature of the disease. I have a few times seen these cases in the same house with undoubted typhoid fever and once with undoubted simple continued fever. Dr. Boone, our health officer, tells me there has been a great many cases of typhoid fever reported this summer and fall and but very few deaths, so it looks as if many of the cases reported were such as I have described in this paper and that my experience in having so many cases of this nature at this time has been that of my colleagues. Recently cases of "enteric fever—not typhoid" have been described. The enteric symptoms in my cases would not warrant this title. Constipation was present in twelve cases and free purgation and other treatment directed to the intestines had no effect. The stools were not particularly offensive except once or twice in two or three cases. The retracted abdomen in most, and the absence of gas or other evidence of intestinal fermentation in any seems to rule out auto-intoxication from the intestinal canal.

DISCUSSION.

Dr. Eddy, of Bellaire.—I am very much pleased with Dr. West's paper. It meets with my hearty approval, because in my own practice I have met with many cases similar to those already recited. A case with a simple continued fever, probably with no other characteristic typhoid symptoms should not, in my opinion, be called typhoid unless confirmed by the microscope revealing the presence of the specific bacillus of Eberth.

Dr. Heinlein, of Bridgeport.—I was very much interested in Dr. West's paper and I wish to say now that we should be proud of having such practical workers in our Society. The Doctor presented the subject in an able manner and the description of his cases resembles closely some I have seen in my own practice.

Although the symptoms are not typical, we call the disease typhoid fever. I hope this subject will be taken up more widely by the members of the Society and these cases studied more thoroughly in order that we may come to a definite conclusion as to whether or not we are having in our midst another disease we have been calling typhoid fever.

Dr. Williams, of Martins Ferry.—I often see cases of continued fever similar to those described in the paper, cases that do not follow the course of classical typhoid fever nor present many of the symptoms of that disease, but still I believe they are typhoid. Typhoid fever may present itself, like some of the other acute infectious diseases, at times, in which the attacks are light or pursue an anomalous course. It is well known how varied scarlet fever and diphtheria may be and no doubt typhoid fever may and does vary as much. The character of typhoid fever is changing, at least it has with me since I began practicing. Formerly I saw the characteristic cases as laid down in the books, with the delirium, dry tongue, sordes, distended abdomen, etc., but I very rarely see such cases now. This is either due to a change in the form of the disease or to a change in the treatment and my opinion is that the former is the reason, and this, and the study of similar cases, leads me to think the cases reported this afternoon typhoid fever of a modified type. No doubt the microscope would have shown the same.

Dr. Moffett, of Businessburg.—All the cases of continued fever I have seen in the past two years, with one exception, were such as are described by Dr. West. I have called them typhoid fever because they resemble that disease more than any other I know of and because I do not know what else to call them. I have seen malaria in Missouri, but never any cases similar to these, and I have seen autumnal fever in the South, but they were not similar to the cases mentioned. I have failed to find the rose spots in my recent cases of continued fever, although I have looked carefully every day in some of them.

Dr. Cope, of Barton.—I look upon all cases of continued fever as typhoid. The cases described in the paper I consider to be mild forms of typhoid fever. I believe Dr. Osler is right in saying these cases should be considered guilty of typhoid until proven innocent. The more I see of these irregular fevers the more convinced I am they are typhoid. In our section we rarely see the cases of typhoid fever with delirium, subsultus, unconsciousness, etc., although we see quite a number with high temperatures, hemorrhages, and apparently severe infection.

Dr. Howells, Bridgeport.—When Dr. West announced at our last meeting his purpose to present a paper on this subject I was greatly pleased at the prospect, for the inquiry that gave rise to this paper is one which must have arisen in the mind of every practitioner at some time in his practice.

In the interval I have looked up the matter in a limited way and find under the head of Protracted Simple Continued Fever, Tyson quotes a number of authors who have tried to solve this problem in giving a name to the condition.

It has been my custom to classify these typical cases under the general head of typhoid recognizing at the same time that the distinctive characteristics of the disease were absent. This view has been sustained in some cases by the existence, in the same family where undoubted typhoid fever cases were, of this peculiarly mild form of fever. We recently had a localized epidemic of typhoid in the town, among which I saw several cases in which the diagnosis would have been a question if it were not that other members of the same family had typhoid.

It is in this way that I have come to view this class of cases as modified typhoid or to place them under the head of auto-infective. I trust that the day is not far distant when some simple, specific, infallible test for typhoid is available and I feel that we are indebted to Dr. West for his able and carefully prepared paper, for it is in the hands of such men that do what may be called pioneer work that this, along with other similar problems, will be solved.

Dr. Korner, of Woodsfield: In my opinion more mistakes are made in the diagnosis of typhoid fever than in any one other disease. During the war with Spain, when our troops were camped in the South, 60 per cent. of typhoid cases were diagnosed at the outset as malarial fever, due to the irregular course of the fever. All cases of continued fever, not influenced by quinine in this section of country, are typhoid. Malaria does not exist in this region, at least I have never met with any irregular type of fever that was influenced by quinine; all such cases proved to be typhoid. The majority of typhoid cases are irregular, the so-called typical cases are the exception. The step-ladder increase of temperature at the beginning and the crescent formed by the entire course of the disease, spoken of by the older writers, I rarely see. The fever chart in many cases is as irregular as in æstivo-autumnal. The fever charts that Dr. West has shown to-day are very much like the ones recorded by myself, where the

rose spots were unmistakably present. Typhoid comes on and terminates as abruptly as pneumonia in many cases. Too much stress has been laid on the classic symptoms by our authors, and these are misleading to many practitioners, for many think unless we have marked nervous symptoms with tympanitis and diarrhea typhoid fever does not exist. True, we have all these symptoms in the severe case, but not in the milder ones. The same argument will apply to mild cases of scarlatina and diphtheria. The eruption is pathognomonic of typhoid fever and is present in more than 90 per cent. of my cases. In 100 cases recorded the eruption was present in 90. The ten cases in which it was absent were all in one family. Ten members out of eleven, all excepting the baby, had the disease in a severe type, all the classic symptoms were present except the eruption. Two had intestinal hemorrhage; one died from toxemia. In a few instances I have seen the eruption wanting in the primary attack, but a recrudescence having occurred the eruption was abundant. I believe in fully 95 per cent. of cases of continued fever I find the eruption and on this I base the final conclusion. By the eruption I mean the typical rose spots and not every accidental pimple, nor on one spot, but a sufficient number. The reason the eruption is not found oftener by many practitioners is because close enough search is not made for it. I have seen typhoid fever diagnosed as malaria, as meningitis, as appendicitis, also as acute tuberculosis. Many times at the outset it is diagnosed as *grip*, yet in these cases the rose spots were demonstrated and the diagnosis was settled. The character of tongue described by the writer I frequently see where several of the classic symptoms are present. In these cases where the coating is white I observe it is broad, moist and flabby and the patients do not have sufficient catarrhal trouble to produce mouth breathing. The coated tongue with red tip and borders is not typical of typhoid alone, we see it in every febrile condition of equal serious import.

Tympany and iliac gurgling are many times wanting. I can recall two cases I recently treated where iliac tenderness and gurgling were absent, as well as no tympany. The abdomen in both cases was sunken during the entire course of the disease. Both cases had numerous rose spots, red tongue and characteristic stools. Most of the writer's cases were constipated. In my series of cases constipation was the rule in the early stage of the disease and continued throughout the disease in at least one-half the cases. Dr. West does not tell us the character of stools his patients had.

The fact that so many of the writer's cases had sudamina is a strong point in favor of typhoid. I have seen sudamina more frequent in typhoid than in any other febrile disease. The fever charts shown by the writer bear striking resemblance to the cases treated in Woodsfield the past year, but the rose spots were present in every case. Most of these cases had a normal temperature in the mornings after four or five days' treatment with an evening temperature of 101 to 103. The average course was twelve or fourteen days.

I do not think there is any doubt whatever that the cases described by Dr. West are cases of typhoid fever of a mild type, as I have seen many cases like them, the only difference being the absence of the eruption in his cases and its presence in mine. Lastly, I would suggest that future cases of this type of continued fever, in order to settle the diagnosis, Widal's test be tried.

Dr. McClellan, Bellaire: I congratulate the essayist on his interesting and thought inciting paper. He has honest doubts as to the real character of the cases reported and he well formulates his ideas for our consideration.

Typhoid fever is acknowledged to be the most complex of diseases and a great variety of so-called forms have been described. I have no difficulty in accepting the cases reported in the paper as atypical forms of the disease. Atypical forms of diseases are common. In one child an infection may be announced by convulsions and vomiting followed by high fever, coma and death, while the remainder of the family that were infected from the same source may have the disease with varying degrees of mildness or severity.

The grip is an excellent illustration of the endless diversity of symptoms and variety of forms a disease may assume. One patient takes it with all the symptoms of cholera morbus; another presents a perfect clinical picture of dengue; another case much resembles meningitis. In yet another the disease spends its greatest fury on the respiratory system.

What is true in reference to the diseases mentioned may be alike true of any zymotic disease. The soil that receives the germs here, as elsewhere, largely determines what the harvest shall be, except in so far as treatment may modify the results. New residents of Bellaire are more liable to contract the disease than those who have long been accustomed to our environment. In newcomers the disease, as a rule, is so pronounced that he who runs may read, while the atypical cases are more likely to appear

in old residents. Age also has something to do in modifying typhoid fever. The greatest liability is between 15 and 25. Liability begins to cease at 35, and is almost nil at 50; while it is a recognized fact that of cases supposed to be typhoid fever in children are simply typhoid states of other diseases, as pneumonia, tuberculosis, inanition, etc. The bacteriologists deserve great credit for the masterly work they have wrought; but when the question of mixed infection comes up they confess that their symptomatology and reducing the mortality of typhoid fever even work has but just begun. It may be that many of our anomalous cases are due to a mixed infection. The doctor says, "The absence of signs and symptoms was the chief characteristic of each case." He then states that they had fever, anorexia, prostration and bronchitis, and some of them had constipation. Some abdominal pain was complained of in eleven, and tenderness was elicited by palpation in all.

I do not think anyone who is handling much typhoid would find it difficult to pick out a number of cases within a reasonable time, with the above group of symptoms and be comfortably satisfied as to the correctness of his diagnosis.

He further says, "Not once was a dry tongue seen; not one had a distended or tympanitic abdomen." The doctor knows how to manage typhoid fever; he uses water freely, inside and out. He keeps the bowels cleansed. He rarely gives whisky, and the diet is carefully looked after. Take one of these cases with a moist tongue, a flat belly and constipation and put him on the old regimen, viz., a tablespoonful of whisky every two hours, with quinine every three hours, and opium for diarrhea instead of a laxative and in a few days you would have a dry, red tongue, a swollen belly as resonant as a drum, with delirium and subsultus galore.

Scientific management has much to do in modifying the if it can not lay claim to cutting short its course.

Dr. Korell, of Key: I expressed the results of my observation and consideration regarding typhoid fever more than nine months ago in this society by stating that I felt confident we had a disease to contend with in this locality that was neither typhoid nor malaria. I now again concur with the writer of the paper that the cases he describes are just such cases as I referred to, and they are, in my opinion, neither typhoid nor malarial. I have always remembered the teachings of Loomis, who speaks of the wide range of typhoid fever, but still I believe I have seen com-

paratively few cases of genuine typhoid fever. I am satisfied, and have been for some time, that we have a separate and distinct form of continued fever, such as described in the paper, that is entirely distinct from typhoid. The gastro-intestinal symptoms in the two diseases are quite distinct. The tongue in particular shows a marked difference; it looks as if it had been spread over, often only in places, with "smear-case," or cottage cheese, or as some one suggests, as if it had been white-washed. This white coating often exists, to a lesser extent, over the pharynx, tonsils and uvula, in fact all over the throat. There is not continuous tenderness in the right illiac fossa, nor any other place; often no tenderness at all about the abdomen. Looseness of the bowels is very rare. The presence of a continuous fever with but so few other symptoms, as mentioned in the paper, and with so little change in the patient from day to day is striking. It is my opinion there is a lack of activity of the bodily functions due to depression of the nervous system, probably the result of an auto-toxaemia, aided often by impurities in the drinking water or from other sources, the system under the circumstances being unable to cope with the toxins. Loomis, in his 8th edition, says there is a condition of septic poisoning occasionally met with resulting from the introduction into the system of septic poison through the drinking water, which so closely resembles that which is the result of typhoid poisoning that it is almost impossible to make a differential diagnosis. In these cases the absence of the rose-colored spots is almost the only distinguishing feature. A careful investigation of all those cases of typhoid having no eruption will, I believe, lead to the conclusion that they are not typhoid at all, but just what is described by the writer. Of this fact I have been satisfied for years. Remembering the different grades of toxaemia in typhoid fever, how it depresses one, excites another, etc., and how differently it affects different people, the observation leads me to believe that we have many cases of continued fever that are not typhoid. I have been calling these cases typhoid fever because I do not know what else to call them, and they more closely resemble typhoid than any other disease. Malarial diseases are very rare in this locality.

Dr. West: It has certainly been a pleasure to listen to this discussion, and since I will have to be brief in closing, some points can not be touched on. We have known each others views on continued fevers, and while the paper and discussion may not have made any changes they will, I am sure, stimulate us to closer

study of these cases, and sooner or later we will all be of one mind on the subject. First, as to the use of the microscope. My paper was entirely clinical, and since our facilities and time for microscopical diagnosis are so limited we must depend on what we see at the bedside. I know of two cases diagnosed by Widal's reaction that were not typhoid, and later learned the reaction was not perfect, but still the microscopist gave a positive statement. Reading current literature shows the test is not always reliable in doubtful cases, and there is still more to be learned about this test and its limitations. Farthermore, I know most of you well enough to say that the result with the microscope would have to be most positive before you would allow your clinical diagnosis to be changed by it. So, for the present at least, the microscope should not be permitted to set at naught all our clinical observations.

I am sure we have some malaria here; not very many nor severe cases, but still some. Whether or not one form of malaria, as the aestivo-autumnal type, would change into another type, as the tertian, as in the case of Harry Shempf, given in the paper, I do not know, but it would seem very unlikely. Then quinine had no effect. Dr. Howell has made particular mention of simple, continued fever. Most of the physicians of Bellaire had an opportunity to study this disease a number of years ago when we had an extensive epidemic of it here. So much was said of this epidemic by the newspapers of the state that a committee from the State Board of Health came on to investigate it, and decided after three hours' stay that it was typhoid. The burden of the proof was that it was a continued fever and therefore typhoid fever. I had at this time one case similar to those described in the paper that ran on for three and a half weeks and had called it simple continued fever at first. The trouble I had in explaining why this case was sick so long while others all around were getting well in a week, made it a very impressive one. The differences in the two diseases are sufficiently pointed out in the paper.

I am well aware that typhoid fever may assume very varied forms, but I am positive that only in a very small minority of even atypical cases will there not arise some symptom or symptoms during the course of the sickness to tell us certainly whether we have or have not typhoid fever. We need only to watch closely. It is not necessary now to go over the symptoms of typhoid fever in detail and contrast them with those in these cases, but I want to mention two. Often in typhoid fever the

facial expression alone gives the clue to the disease; it has, almost invariably, even in the mildest cases and in the light walking cases, the dull depressed look with a smoky intellect. In only one of the 15 cases was there even a tired look; the face indicated no suffering, ill-feeling, or even sickness, and the mind was always bright. Likewise the belly will rarely fail to show some symptoms, usually swelling, and if there is soreness it is not so changeable; while in these cases there never was any swelling, rather retraction, only accidental rumbling, and the pain or pain on pressure changed very much. Cough as a symptom of typhoid fever, especially in children, should be remembered. It has been some time since Dr. Korner first told me he found rose spots in at least 90 per cent. of his cases, and I have since looked more carefully and believe his estimate to be nearly correct. Dr. McClellan's statement as to the intensity of typhoid infection on old and new residents is new and interesting and one that should be kept in mind in studying these cases. The case detailed, that of Jesse Philips, who first had this form of fever for three weeks and then undoubted typhoid, should have had more weight in the discussion than it did. The second attack could not have been a relapse of the first; they were too unmistakably different in every particular.

In conclusion I wish to say that in visiting these patients atypical typhoid, as well as the different results of infection on different individuals, was kept in mind, and still the diagnosis of typhoid fever was not satisfactory. A continued fever does not make even an atypical typhoid fever. We must have more than this to make a diagnosis and the symptoms common to the febrile state are not the symptoms of typhoid fever. Dr. Osler's dictum, as mentioned by Dr. Cope, ought at least to stimulate us to a careful study of the individual cases with persistent fever as the prominent symptom until they are finally proved either innocent or guilty.

REPORT OF A CASE OF TABETIC ARTHROPATHY OF
THE KNEE JOINT OCCURRING IN A CASE
OF PARETIC DEMENTIA.

BY WALTER G. STERN, M. D., CLEVELAND.

Clinical Report.—Name, C. T.; age, 32; occupation, undertaker; married. Referred by Dr. Baldinger.

Family History.—Mother is at present suffering from some trouble in left leg and knee; one sister died of tuberculosis; daughter also died of tuberculosis.

Personal History.—Had usual diseases of childhood, contracted gonorrhoea several times; and nine years ago had chancres, which were followed by rash, falling out of hair, and later on by "bad blood breaking out over the body." Thorough treatment was instituted. Several years after he married. His wife bore a healthy child. Six or seven years ago he suffered an injury of right knee which became stiff and large. It was never very painful and after a period of fixation and specific treatment became better. There was no fracture, knee never broke open, no sores formed about knee. After the death of his daughter, he became gloomy and morose, and hard to get along with; and his wife left him on this account. He had no delusions of grandeur, nor moral lapses; the mental change was only a depression of his spirits and ambitions. Two years ago he suddenly lost his memory. He was unable to make himself understood, either by speech, sign or writing; his hands and arms were useless on account of a violent tremor. He was never in stupor. Never complained of headache. No passing paralysis of face or eye muscles. After several months of vigorous antisyphilitic treatment he recovered to a marked extent. There remained a slight sensory aphasia (he was unable to always use the right word to express an idea); the use of hands and arms returned although fine tremor persisted; he was able to stand and walk about with the aid of crutches. Mentally he was entirely a different man than when, six years ago, he was deputy coroner of a large city. Now he is peevish, morose, lacks intuition and perception, is quarrelsome about trivial affairs, appreciates everything at a higher value, and pictures his surroundings on a much higher plane than they really are. He can read but does not understand the full import, and quarrels about different interpretations of sentences or paragraphs. Sexual functions impotent. Bladder and rectum always under patient's control. Appetite has been good, sleeps well. During this period it

was also noticed that his knee was much enlarged and stiff, and that he was unwilling to bear his weight upon it. For this latter he was referred to my care for treatment.

Status Praesens, Dec. 20th, 1900.—Development good, patient has lost a great deal in weight; skin moist, of good color; a few round depressed white scars on limbs and body; slight glandular enlargement. No roughening or pain over long bones (except right knee); no cranial depressions. No oedema. Heart, lungs and abdominal viscera neg. No arterio sclerosis. There is a fine rapid tremor of all the muscles of the body, fibillary twitching of the tongue. No intention tremor. No areas of anasthesia nor analgesia but patient is very slow to interpret stimuli. No change in perception of heat and cold or electricity. No paralysis of any muscles. Reflexes are tremendously exaggerated, ankle and thigh klonus present, slight incoordination, no Romberg symptom, skin reflexis active, can recognize objects placed in hand. Mentally he is very slow, ideas are labored. He understands only after several attempts, he forgets what he wants to say before completing the sentence. In speaking he does not mix his syllables (Silbenstolpern), but is slow in pronouncing each syllable. He has no conception of the seriousness of his ailment. He chuckles and is happy at the attempt at a joke which is always flat and never to the point. Cranial nerves are all normal except II., III., IV., VI. Vision is good, pupils unequal, respond active to accommodation, but extremely slow and sluggish to light. There is a marked nystagmus, concentric narrowing of field of vision for colors and shapes until vision is absolutely central (see Dr. Brunner's correction). Disk is slightly swollen and injected.

The right knee is considerably enlarged, the skin over the joint is tense and shiny and the veins are enlarged and injected. No fistulae or sinuses. No oedema, no fluid demonstrable by puncture. The tissues about the joint are firm, yet doughy in spots and an "eggshell" crackling demonstrable. The lower end of the femur is enlarged but the chief increase is in the head of the tibia which is smooth, firm and enlarged in all directions, pushing the patella upward about 3 cm. No genu recurvation, no subluxations, no lateral motion. The joint is firm and painless, joint sense is preserved. Motion reduced to about one-fourth, X-Ray shows ends of femur and tibia enlarged but chief enlargement is in cartilage.

The diagnosis lay between paretic dementia and diffuse syphilitic encephalitis. R Fixation of knee. K. I. Inunctions of Ungt. Hg.

Jan. 24, 1901. Condition about same. R Sodium Nitrite gr. V. t. i. d.

Feb. 14th, 1901. Marked improvement in general nervous condition. Tremor and reflexes markedly diminished; patient can walk a long distance, he can shave himself, has become an active politician. Removed cast from knee. Joint is much smaller and after breaking up a few adhesions, flexion and extension are almost complete. He can write name perfectly, has composed a good letter to sister.

March 7th. About the same—discontinued sodium nitrite.

March 14th. Knee joint suddenly enlarged and has suffered a subluxation of the tibia. The lateral ligaments have relaxed enough, so as to allow about two inches of lateral movement to foot when femur is fixed. The genu varum (from subluxation of the tibia) is markedly increased when patient steps on knee. By proper manipulation the limb can be made straight, without the slightest amount of pain. The X-ray reveals the articular ends of the bones enlarged with the shaft of the femur and tibia meeting at an angle of 160 degrees. Mentally the patient is much worse. Cannot repeat catch sentences. Diagnosis: Tabetic Arthropathy occurring in Paretic Dementia.

March 30th. Ophthalmoscopic examination by Dr. Brunner. Disc normal, except for slight injection, vessels normal, right pupil contracted, pupils react slowly to light and prompt to accommodation. By the usual tests (perimeter) field of vision is found concentrically narrowed. But when the patient is asked, "How many fingers do I hold up," instead of the usual formula, "tell me when you see my fingers," the answers are prompt and field is found to be but slightly contracted. The phenomenon is entirely cerebral.

April 3d. Mental activity diminished, cannot write properly, cannot spell. Joint somewhat larger, motion is less, is painless and eggshell crackling persists, slight amount of fluid in joint.

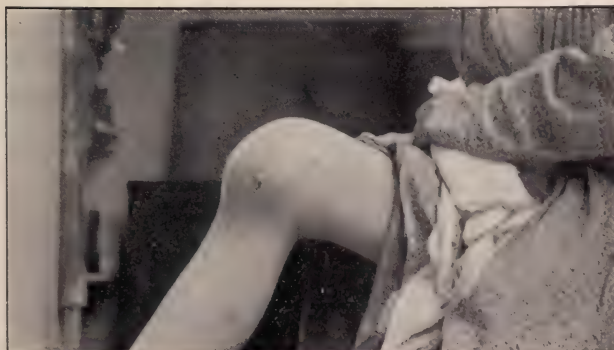
Tabetic arthropathy, better known as Charcot's joint disease, is a trophic disturbance of the bones, cartilage, synovial membrane and ligaments about a joint. Charcot, who gave the first classical description (although he gives this honor to Mitchell of Phil.), speaks of it as occurring in locomotor ataxia; but in his later writings, mentions its occurrence in myelitis of various kinds, after compression of the chord in Potts disease or fracture, haematomyelia, syringomyelia and ascending lateral sclerosis. It is not unknown, however, in paretic dementia, as shown by the mono-



TABETIC ARTHROPATHY IN PARETIC DEMENTIA.



ARTHRITIS DEFORMANS.



SYPHILITIC ARTHRITIS.

graph of Westphal and the references to it by Krafft, Ebbing and Mendel.

Clinically (as seen most typically in locomotor ataxia) it has been found that the knee joint was most often affected. Out of 149 cases Flatow reports: knee, 60; foot, 39; hip, 38; shoulder, 27.

In the smaller joints, finger, wrist or ankle, it is quite uncommon. Charcot and Frere described in 1888, a peculiar change in the foot, in which they described under the name "*Pied tabétique.*" The foot becomes round and shortened, and the internal plantar arch sinks down. The same process may and does attack the bodies and joints of the vertebral column; Koenig reporting a well marked case of spondylolisthesis. I do not know of the jaw having been affected. It occurs most frequently late in the course of locomotor ataxia. According to Kredel's report of 132 cases 21 occurred in prodromal stage, 38 occurred in 1-5 years, 32 occurred from 5th-10th years, 41 after 10th year. There was no record of the stage of parietic dementia, in which it was most frequent. In our patient it was undoubtedly an early symptom. That the early appearance might have been due to the active syphilis is borne out by this photograph of a syphilitic knee.

There are two distinct types described, 1st, the destructive, which is by far the most common, and 2d, the hypertrophic, which is nicely shown by the case at hand. To these I might add two others, namely: 3d, those which begin as destructive and later show hypertrophic changes, 4th, those which begin as hypertrophies and then go to pieces. However, this classification is purely schematic, no case adhering closely to any definite rule.

The disease is painless, and comes on with great suddenness, often after a slight trauma, with a large effusion into the joint, which distends the capsule and separates the ends of the bones. The ligaments, muscle tendons, capsule and synovial membranes, already weakened by the trophic changes, give way; and dislocation or subluxations result. A rarefying osteitis has already made the bones quite brittle and it is most likely that bits and splinters of bone are torn off, which may give rise to an excessive callus building. As the effusion is slowly absorbed, bony deposits in the ligaments and cartilage help the callus to keep up the deformity. In the hypertrophic form the ends of the bones slowly enlarge, the ligaments giving way little by little, until finally the deformity is increased by a sudden effusion. It is most likely an unnoticed fracture, resulting in an excessive callus formation. Gowers reports a case, where without previous fracture, the inter-

nal condyle enlarged enormously. This he ascribes to an irritation, which leads to an irregular enlargement and the formation of new bone, instead of the usual wasting and atrophy. The destructive processes may keep up, until perforation takes place, with empyaema of joint and purulent inflammation of surrounding tissues resulting. Generally the process ceases before the ligaments are entirely softened; and the patients are able to walk about, using their flabby, flail-like joints to a greater or lesser extent.

Pathologically tabetic arthropathy has been described as similar to the vague process known as arthritis deformans (Leyden). Strümpel ascribes the changes to a rarefying arthritis. Gowers presupposes a number of trophic changes coming from changes in the trophic cells of the spinal chord (Ball), and following these a spontaneous fracture with excessive callus formation. Leube holds that tabes, paretic dementia, etc., are only predisposing factors which cause a rarefying osteitis and at the same time render the patient liable to trauma, which passes unnoticed on account of the blunted sensibilities, anaesthesia, dementia, incoordination and violent movements. He reports a case where a fracture of the femur occurred whilst the patient lay quietly (?) in bed. He would ascribe the lighter changes to traumatic synovitis. The photographs I show here are of a case of arthritis deformans, are similar in appearance to the early changes in the case under discussion, except that in the latter the deposits were greater. Goldscheider mentions the arthropathies as being often combined with myositis ossificans. From the various and varying descriptions, I would conclude that there have, as yet, been no certain and constant findings reported.

The only treatment is palliative. Fixation and resection have been tried but the inevitable unfavorable termination of the nervous disorder, which the arthropathy accompanies, make all attempts at permanent improvement futile. The patient can, however, be greatly benefited by any procedure which can restore to him, be it for ever so short a time, the power of locomotion and the ability to help himself.

516 Rose Building.

DISCUSSION.

Dr. Stern: Dr. Leuke has rightfully remarked that three months ago the diagnosis between diffuse cerebral syphilis and dementia was extremely difficult.

The sudden enlargement of the joint, the subluxation, the small amount of lateral motion and the painlessness make the

present change a nervous one. Was the previous condition a syphilitic one? It is possible. Fournier describes a case in the wards of the St. Louis, where there were syphilitic necroses of the upper and lower maxillae and sternum, at the same time the patient presented unmistakable symptoms of locomotor ataxia, such as lightning pains, loss of knee jerk, girdle pains, incoordination, Argyll-Robertson pupils; and later on, the same patient developed typical Charcot joints in hip and knee. Our patient has none of the symptoms of locomotor ataxia. Temporary improvement is often noticed in paretic dementia and the observer ascribes it to the drug then exhibited. In our case we imagined it was the K. I. and sodium nitrite, and that this therapeutic test was confirmatory of lues; but at present the mental changes, the speech, tremor and writing leave no doubt but that it was never aught but a mild progression of paretic dementia complicated with a Charcot joint.

Abstracts and Extracts.

"Clinical Experience With Adrenalin," by Emil Mayer, M. D., Surgeon, New York Eye and Ear Infirmary, Throat Department; Fellow American Laryngological Association; and of the New York Academy of Medicine, New York. Abstract from original paper, in the *Philadelphia Medical Journal*, April 27, 1901.

The aqueous extract of suprarenal gland is perhaps the best culture medium known. Its instability, the involved method of preparation, its unsightliness, and the inexactitude of its various strengths tend to make us welcome a preparation that is exact, stable and above all, clean. Dr. Jokichi Takamine undertook the task of isolating the active principle of the supraenal gland. He obtained a substance in stable and pure crystalline form, which raises the blood pressure, and which he named "Adrenalin."

The author has used solutions of Adrenalin Chloride, 1 to 1,000, 1 to 5,000, and 1 to 10,000; his cases were all rhinological. Blanching of tissues followed the application of the strongest of these solutions in a few seconds, and was very thorough. In no instance was there any constitutional disturbance. He has employed no suprarenal extract since, for any purpose whatever.

The effect of the solutions was not altered by their change to a pink color; they were used for six weeks. Subsequently a

small amount of chloretone was added to the fresh solutions and now there is but slight change of color and no floccules appear.

Thirty-five cases are reported in tabulated form, showing that the usual effect of the aqueous extract of the suprarenal gland was obtained. A few operative cases bled freely, but in every instance the hemorrhage was promptly checked by a second application of Adrenalin. The Adrenalin was used not only as a hemostatic, but for the relief of nasal congestion, as a diagnostic aid, and for the continuous treatment of acute inflammatory affections of the accessory sinuses.

The author arrives at the following conclusions:

1. Adrenalin solutions supply every indication for which the aqueous extract has been used.
2. They are sterile.
3. They keep indefinitely.
4. Solutions, 1 to 1,000 are strong enough for operative work; and 1 to 5,000 and 1 to 10,000 for local medication.
5. They may be used with safety.

In this connection it is interesting to note that E. Fletcher Ingals, M. D., of Chicago, also has had a very satisfactory experience with Adrenalin. In a paper entitled "Notes on Adrenalin and Adrenalin Chloride*", he reports that he experimented with solutions, varying from 1 to 1,000 to 1 to 10,000, of the Chloride of Adrenalin in distilled water or normal salt solution, and kept careful records until satisfied of its activity. In nine cases a very small quantity of a spray, of one part of Chloride of Adrenalin to 10,000 parts of water, was applied to the nasal cavities, with the effect of blanching the mucous membrane quickly, and in most cases causing contraction of the swollen tissues similar to that caused by cocaine. The first solution used was made with distilled water and caused smarting; normal salt solution was then used as the solvent with perfect satisfaction. The smarting may have been due to the presence of a small quantity of formalin in which the atomizer had been washed just before use.

Experiments were also made with insufflations of a dry powder consisting of 1.5 per cent. (75 parts) each of biborate of sodium and bicarbonate of sodium; 3 per cent. (150 parts) light carbonate of magnesium; one part of Adrenalin, to 5,000 parts sugar of milk. This powder cleared the nasal cavities when ob-

* *Journal of the American Medical Association*, April 27, 1901.

structed by swelling of the turbinated bodies, and diminished the secretions decidedly. A case of daily epistaxis was relieved by sprays of a 1 to 10,000 solution. Another of conjunctival congestion from overwork was entirely relieved by the instillation of a similar solution. The author has had equally satisfactory results in cases of conjunctivitis; laryngitis, acute and chronic; acute laryngitis with edema glottidis; acute coryza; chronic laryngo-tracheitis with acute exacerbation; and in preparation for operations upon the nose.

In conclusion, the following results are presented: This remedy will be of great value in the treatment of acute inflammatory affections of the nasal cavities, either in sprays of 1 to 5,000, or in powders of 1 to 5,000 or 1 to 2,500, sugar of milk. In acute coryza and in hay fever, in epistaxis from various causes, in acute inflammation of the fauces, solutions of 1 to 1,000 will have good effects. In acute or subacute laryngitis, solutions of 1 to 1,000, applied with moderate force, will give very great relief; it appears probable that vocalists may obtain sufficient relief from congested cords, for at least two or three hours, to obtain normal efficiency in the use of the voice.

In a paper read before the Chicago Laryngological and Climatological Association, W. E. Casselberry, M. D., called attention to the fact that Adrenalin Chloride Solution is clear, colorless, odorless, sterile, and stable, if protected from heat, light and oxidation; it is non-irritating to mucous membranes. When applied locally it exerts identically the same vaso-constrictor influence as the aqueous adrenal extract. Sprayed into the nostrils in the strength of 1 to 10,000 it produces a visible change from turgidity to compactness of the turbinated tissues, and a decided pallor of the mucous surfaces. In the strength of 1 to 1,000, or even 1 to 5,000, it has the power to limit hemorrhage during operations and is an aid in the treatment of epistaxis. It may be substituted for cocaine in all cases in which an ischemic effect is desired, e. g., to facilitate inspection of the deeper recesses of the nasal cavities and to make them more accessible. Adrenalin has little or no cerebral stimulant effect, exciting no desire for more of the drug; hence there is little risk of habit-formation.

The author expresses the opinion that Adrenalin should afford relief in asthma associated with bronchitis and vaso-motor paralysis, although he would expect little benefit from its use in asthma characterized by bronchial spasm. It may be formed into

an ointment with vaseline, or mixed with stearate of zinc, powdered starch, or sugar of milk to make powders for nasal or laryngeal insufflation. The bibliography is very comprehensive, covering the literature of the subject down to the present date.

* * *

AUTOMATIC SAFETY-VALVE STOPPER—A DEVICE PREVENTING THE
BURSTING OF PEROXIDE OF HYDROGEN BOTTLES.

The great trouble with peroxide preparations is that if the containers are tightly corked, the oxygen which separates and is set free, slowly but constantly as time passes, accumulates, until the bottles can no longer stand the pressure and burst, or the corks are driven out. Of the two alternatives, the bursting of the bottles is the most objectionable feature on account of the danger attached to it.

Containers of the hydrogen peroxide, U. S. P., which is a comparatively weak solution of the H_2O_2 , yielding but 10 vol-



a
(a) Puncture.

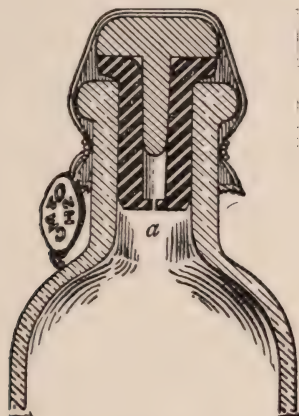
Cut No. 1. Illustrates the cross section of the safety valve rubber cork, showing the wooden top and the puncture at the bottom. A thin strip of paraffined paper is inserted into the puncture.

umes of oxygen, may be closed with a wooden stopper, which, by the porous nature of the material, permits the escape of the gas almost as soon as it is set free, thus avoiding explosion and rupture of the bottles or the driving out of the corks.

While these wooden stoppers answer very well for solutions of H_2O_2 responding to 10 volumes of oxygen or less, with stronger solutions, such, for instance, as Marchand's peroxide of hydrogen medicinal (15 volumes), or his hydrozone (30 volumes of oxygen) they are quickly attacked by the solutions, as are also the ordinary corks, and within four months are completely oxidized, not merely bleached, but rendered so soft that they cut like pot cheese. From that time the goods are unfit for sale.

In order to prevent these difficulties and especially to obviate the bursting of the bottles containing hydrozone, Mr. Marchand, the manufacturer of that article and other well-known brands of

peroxide of hydrogen, has devised an ingenious stopper which he calls the "automatic safety-valve rubber cork," and which is shown in the illustration.



(a)

Cut No. 2. Illustrates the cross section of a bottle corked and capped with vegetable parchment and paraffined muslin; no wire.

The material of the stopper is vulcanized rubber. The beveled end is punctured through in such a manner that when the pressure in the bottle rises above 5 to 8 pounds to the square inch (according to the thickness of the rubber at the bottom,



Cut No. 3. Illustrates the top of the bottle with the seal.

which may vary slightly), the excess of free oxygen finds free egress and thus relieves the tension.

This device is first inserted, and a plug of porous wood is then driven in, thus stiffening the rubber and completing the operation of "corking."

The capping consists of vegetable parchment covered with paraffined muslin, no wiring being used or needed.

It is easily seen that this style of closing the bottle obviates the possibility of bursting. Assuming even, that through some imperfection of the stopper, the puncture should close, as soon as the pressure rises to a point far within that required for rupture of the bottle, the stopper, not being wired down, will yield and be forced out.

Retail druggists who have for so many years been the chief sufferers and losers from the bursting of the peroxide containers, and the deterioration of the substance otherwise from the causes indicated above, will welcome Mr. Marchand's invention as a happy solution of what has to them been a very serious problem in the past, since it will enable them to supply their trade with the higher solutions of hydrogen peroxide, and especially that preparation of Marchand's, for which the stopper was particularly designed, "hydrozone," which carries 30 volumes of oxygen.

The device described above—the automatic safety-valve stopper—having entirely obviated the danger arising from the explosion of bottles in handling, there is certain to be a largely increased demand for Marchand's concentrated solutions of the peroxide of hydrogen (which alone will be corked with the patented stopper), since physicians anxious to obtain quick results will never prescribe anything but the most active solutions, or those richest in active oxygen, and since druggists will be protected absolutely against loss by deterioration or explosion. The medical profession is being thoroughly advised of Mr. Marchand's new method of closing his bottles of "peroxide of hydrogen medicinal" and "hydrozone," and will be certain to avail themselves of the advantages thus guaranteed them.—April, 1901, issue of *National Druggist of St. Louis*.

NOTE.—Remember there is no popping when corks are removed.

THE Cleveland Medical Gazette

ESTABLISHED 1885.

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Editorial.

THE RECENT MEETING OF THE AMERICAN MEDICAL ASSOCIATION.

This year's meeting of the American Medical Association was a great success. Considering the geographical location of St. Paul, the meeting was numerically very large. There were 1,806 members registered, while at Atlantic City last year, with all the advantages of the noted resort and its nearness to the great centers of population, the attendance was 2,019. The scientific work, which after all is and should be the central feature of the meetings, was unusually good. The resolution of last year

limiting the number of papers in each section, had a salutary effect. The average of excellence in the papers was higher. If in the future the officers of sections would assume a little more censorial authority in judging of papers and still further sacrifice quantity to quality, further improvement would ensue. Also it would be an improvement if chairmen of sections were relieved of all responsibility in regard to the social features, notably the section dinners. The senior member of the executive committee of the section or a past chairman or ex-delegate taking charge of those functions, thus dividing the labor, leaving the chairman free to attend to the scientific program and his executive duties, and prolonging the interest of past officers in the welfare of the section. The reorganization of the association, while it did not meet the approval of every member, expressed the will of the majority of those actively interested and continually won friends among those who looked into the situation. It is to be hoped that those who conscientiously opposed the new plan will not become alienated; and that all staunch supporters of the profession and believers in an ideal national organization, even though they may not agree with every single feature of the new plan, will remain or become members of the association, and let their influence be felt, in order that a consensus of the whole regular profession as near perfection as possible may be arrived at. It also becomes more necessary than ever before that every worthy doctor of medicine in the country become an active member of his State and County Societies. The fact that the new organization places more power in the hands of a few, makes it the more important that the right men be chosen to wield that power. This must be done in the State Societies and the State Societies should be made up of representatives from the County Societies, and other local or district societies composed of the sterling elements of the profession.

A question which we think will more powerfully influence the fate of the American Medical Association than will the reorganization of this year, will come up at the next meeting again. It is the question of revision of the code—a question which it was attempted to force upon the association this year. Its consideration at this time would have been extremely unwise; and in our opinion, in view of the present state of sentiment and the rapid progress of medical history, the question of revision of the code would better be left right where it is until some time in the future not yet discernible.

As to the prospects for next year—with John A. Wyeth as President and an able chairman in every section, and Saratoga as the meeting place, the success of the meeting appears predestined. The attractions will be great, the place easily accessible, the accommodations ample and a meeting far greater than that of this year or perhaps of any other year should be attained without extraordinary effort.

S. W. KELLEY.

IMPOSING ON CHARITY.

We take the following from the report of the Rhode Island Hospital, in Providence, for 1900:

"The examining agent at the out-patient department reports that during the year he questioned 5,769 new applicants, admitted 4,959, rejected 175 as not proper objects of charity, and required 635 to bring written certificates that the bearer was a proper recipient of free treatment. Of these 635 only 65 returned with the required credentials."

Roughly speaking, one out of every five applicants were found to be unworthy of charity. We believe that every hospital should exert a similar surveillance, over its charity patients, in order that the attending physician should not be subject to imposition. It is no part of a physician's duty, to ferret out the resources of an individual, after he has been admitted to the hospital. He is not giving his time for that purpose, and the duty should not be imposed upon him. It would not be if hospitals fulfilled their obligations in this direction.

G. SEELEY SMITH.

REMARKABLE DISCOVERY!

An *absolute* cure for colds, coughs, malaria, la grippe, coryza, migraine, neuralgia, pneumonia, biliousness, catarrhal jaundice, intermittent or malarial fevers, and all periodic conditions, including, we presume, dysmenorrhoea from whatever cause, is advertised by a St. Louis Chemical Company in one of the eastern medical monthlies. We are unable to give our readers the formula of the panacea, as it is clothed in a proprietary name. However, we feel sure that the profession will hear of it in the future, as the manufacturers have kindly offered diamond and pearl scarf pins to physicians submitting clinical reports.

G. SEELEY SMITH.

CLEVELAND MEDICAL LIBRARY.

The following new books have been added to the library:

Purchased: Buck, Albert H. Reference Handbook of the Medical Sciences; vol. 2, 1901, Bla-Chl. Progressive Medicine, March, 1901. Virchow's Archives; vols. 1-142 (completes the file).

Donated by Editors *Cleveland Journal of Medicine*, Kyle, D. Braden. Text Book of Diseases of the Nose and Throat, Second Edition, 1900.

Donated by Dr. James E. Newcomb, Sec. Transactions American Laryngological Association, 22nd annual meeting, May, 1900. (1901.)

Donated by Dr. Julian Harmon, Warren, O. Skene, Alexander, J. C. Medical Gynecology, 1895.

Donated by Dr. C. J. Aldrich. Modern Medicine, 1900.

Medical Antiquaria: A large number of cases of surgical instruments, saddle-bags and other objects of interest to the medical profession have been donated to the Library by Dr. Julian Harmon, of Warren, Ohio, and may be inspected at any time during Library hours.

New Books.

A MANUAL OF PRACTICAL HYGIENE. FOR Students, Physicians and Medical Officers. Charles Harrington, M. D. Assistant Professor of Hygiene in the Medical School of Harvard University. Illustrated with twelve plates and one hundred and five engravings. Lea Brothers & Co., Philadelphia and New York. 1901.

The author has aimed in this work to produce a students' text-book which should cover the most important topics included in the wide domain of Hygiene and be useful in the laboratory and as a reference book for practitioners and health officers. It is assumed that the reader has already acquired at least a fair working knowledge of bacteriology, or that, lacking it, he will turn rather to special works in which the science can be fully treated; therefore a chapter on elementary bacteriology has been omitted. Also, certain topics, which lie more properly within the fields of engineering and architecture, such as the construction of aqueducts and sewers, the nature and strength of building materials, etc., and which are not infrequently included in works of this nature, have been excluded.

The book contains 730 pages, the print is clear and on good paper, and the whole nicely bound.

THE STANDARD MEDICAL DIRECTORY.—Messrs. G. P. Engelhard & Co., Chicago, announce the early publication of The Standard Medical Directory containing a complete list, revised to date, of the physicians of the United States and Canada. Supplementing this important Directory will be nine associate Directories comprising an invaluable exposition of all interests related to medicine.

The Directory will be issued in one volume of about 1,000 imperial octavo pages. The work of compilation, in which the editors have the co-operation of the officers of the leading medical organizations of the country, is actively in progress and the Directory is due to appear about August 1. It is believed this great work will be a contribution of distinct value to the entire profession and its appearance will be awaited with interest.

ATLAS AND EPITOME OF OPHTHALMOSCOPY AND OPHTHALMOSCOPIC DIAGNOSIS. By Prof. Dr. O. Haab, Director of the Eye Clinic in Zurich. From the third revised and enlarged German edition. Edited by Geo. E. de Schweinitz, Professor of Ophthalmology, Jefferson Medical College, Philadelphia. With 152 colored lithographic illustrations and 85 pages of text. Philadelphia and London: W. B. Saunders & Co., 1901. Price \$3.00 net.

The great value of Prof. Haab's Atlas of Ophthalmoscopy and Ophthalmoscopic Diagnosis has been fully established and entirely justifies an English translation of his latest edition. Not only is the student made acquainted with carefully prepared ophthalmoscopic drawings done into well-executed lithographs of the most important fundus changes, but in many instances, plates of the microscopic lesions are added. The whole furnishes a manual of the greatest possible service, not only to the beginner in ophthalmic work, but one who has already far advanced and desires to compare the observations of his own service with those of the rich clinic from which Prof. Haab has gathered his plates.

ATLAS AND EPITOME OF THE NERVOUS SYSTEM AND ITS DISEASES. By Professor Dr. Chr. Jakob, of Erlangen. From the second revised German edition. Edited by Edward D. Fisher, M. D., Professor of Diseases of the Nervous System, University and Bellevue Medical College, New York. With 83 plates and copious text. Philadelphia and London: W. B. Saunders & Co., 1901. Cloth, \$3.50 net.

In this Atlas the author has portrayed an instructive section of medicine which is usually extremely difficult of mastery by students and practitioners. This work will be of great value to

the physician. The matter is divided into Anatomy, Pathology, and Description of Diseases of the Nervous System. The plates illustrate these divisions most completely. There is probably no work in existence in which so much is compressed within so small a space. The book is comprehensive and practical.

DISEASES OF THE NOSE AND THROAT. By D. Braden Kyle, M. D., Clinical Professor of Laryngology and Rhinology, Jefferson Medical College, Philadelphia; Consulting Laryngologist, Rhinologist and Otologist, St. Agnes' Hospital. Second edition, revised. Octavo, 646 pages; over 150 illustrations and six lithographic plates. Philadelphia and London: W. B. Saunders & Co., 1901. Cloth, \$4.00 net.

The first edition of this work was exhausted in less than a year. The author has accordingly taken the opportunity of thoroughly revising the book and bringing the subject matter absolutely down to date. The work presents the subject of Diseases of the Nose and Throat in as concise a manner as is consistent with clearness, keeping in mind the needs of the student and general practitioner as well as those of the specialist. The illustrations are particularly fine, being chiefly original. With the practical purpose of the book in mind, extended consideration has been given to details of treatment, each disease being considered in full, and definite courses being laid down to meet special conditions and symptoms.

PROGRESSIVE MEDICINE, VOL. II, June, 1901. A Quarterly Digest of Advances, Discoveries and improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M. D., Professor of Therapeutics and Materia Medica in Jefferson Medical College of Philadelphia. Octavo, handsomely bound in cloth, 460 pages, with 81 engravings and one full-page plate. Lea Brothers & Co., Philadelphia and New York. Issued quarterly. Price \$10.00 per year.

The contents of this volume include: "Surgery of the Abdomen," including hernia, by William B. Coley, M. D.; "Gynecology," by John G. Clark, M. D.; "Diseases of the Blood and Ductless Glands." "The Hemorrhagic Diseases" and "Metabolic Diseases," by Alfred Stengel, M. D.; "Ophthalmology," by Edward Jackson, M. D.

The year's literature on these various subjects has been thoroughly canvassed, and that which is valuable placed in a compact volume of 470 pages.

ESSENTIALS OF THE DISEASES OF CHILDREN. By William M. Powell, M. D. Third edition. Thoroughly revised by Alfred Hand, Jr., M. D., Dispensary Physician and Pathologist to the Children's Hospital, Philadelphia. 12mo., 259 pages. Philadelphia and London: W. B. Saunders & Co. Price, \$1.00 net.

In this revised edition numerous additions and changes have been made in the book so that it continues to represent the present state of pediatrics. The book aims to furnish material with which students may lay the foundation for the successful practice of medicine among children. The section on Infectious Diseases has been rewritten, as well as many of the paragraphs on pathology. A number of new chapters have been added, among others, one on Infant Feeding.

A SYLLABUS OF NEW REMEDIES AND THERAPEUTIC MEASURES. With Chemistry, Physical Appearance and Therapeutic Application. By J. W. Wainwright, M. D., member of the American Medical Association; New York State Medical Association, United States Pharmacopeial Convention, 1900, American Chemical Society, etc. Pages, 229. Price \$1.00 net. G. P. Engelhard & Co., 358-362 Dearborn street, Chicago-1901.

The aim of the author is to present to the profession what information we have of the New Remedies and Therapeutic Measures as obtained from the published clinical reports appearing in medical literature, mostly journals, from time to time. The articles treated of are few when compared with the multitude which are offered the profession, and only those, therefore, which have passed the experimental stage, which have become necessary ones, are included. Further, only those products whose chemistry is known, or whose exact formula are given, appear.

The various articles treated of are arranged alphabetically.

ATLAS AND EPITOME OF OBSTETRIC DIAGNOSIS AND TREATMENT. By Dr O. Shaffer, of Heidelberg. From the second revised German edition. Edited by J. Clifton Edgar, M. D., Professor of Obstetrics and Clinical Midwifery, Cornell University Medical School. With 122 colored figures on 56 plates, 38 other illustrations, and 317 pages of text. Philadelphia and London: W. B. Saunders & Co., 1901. Cloth, \$3 00 net.

This book treats particularly of obstetric operations, and besides the wealth of beautiful lithographic illustrations, contains an extensive text of great value. The symptomatology and diagnosis are discussed with all necessary fullness, and the indications for

treatment are definite and complete. In this new edition both text and illustrations have been subjected to a thorough revision. Most of the colored plates are new, and illustrate the modern improvements in technique as well as a vast amount of new clinical material.

ATLAS AND EPITOME OF LABOR AND OPERATIVE OBSTETRICS. By Dr. O. Shaffer, of Heidelberg. From the fifth revised German edition. Edited by J. Clifton Edgar, M. D., Professor of Obstetrics and Clinical Midwifery, Cornell University Medical School. With 14 lithographic plates in colors, and 139 other illustrations. Philadelphia and London; W. B. Saunders & Co., 1901. Cloth, \$2.00 net.

There is no branch of medicine or surgery that is so difficult to demonstrate as that of midwifery; hence any positive aid, such as this Atlas furnishes, is to be hailed with satisfaction. The author has added to the multitude of obstetric subjects already shown by illustration, many accurate representations of manipulations and conditions never before clearly shown. As a guide in the perusal of text-books and as a volume of ready reference, this book will prove invaluable.

Society Proceedings.

May L. Bassett, Medical Reporter.

CUYAHOGA COUNTY MEDICAL SOCIETY. REGULAR MEETING, MAY 3, 1901.

The regular meeting of the Cuyahoga County Medical Society was held on Friday evening, 3rd May, at the Library Building. The President, Dr. C. A. Hamann, occupied the chair. The minutes of the last meeting were read and approved.

A case of herpes zoster ophthalmicus with corneal involvement was presented by Dr. C. C. Stuart with the following remarks:

Dr. C. C. Stuart: We have had at the last few meetings of this Society several interesting cases of different forms of trifacial neuralgia, so I thought I would present this case which is one of herpes zoster ophthalmicus this evening as being one of something the same character. This young lady was attacked about three years ago with sharp pains over the eye, which were intense in character and continued for three or four days, and finally in the region of the pains above the eye there developed a vesicular

eruption. Later on this was followed by a scarring and it has also left some anesthesia of the skin in the region supplied by the supraorbital nerve, and also of the cornea. There is loss of accommodation with some dilation of the pupil. It was diagnosticated at first as a case of erysipelas and probably did resemble it. The points of interest are the pain and the anesthesia left by it. The pathology of herpes zoster ophthalmicus is somewhat wrapped in mystery, but it is supposed to be some form of neuritis probably of central origin.

Dr. Lauder: Did the ulcers heal readily?

Dr. Stuart: I cannot say. The case was not here in the city and the difficulty was progressing for so long a time that I cannot say.

Dr. Lauder: In case of corneal anaesthesia it is much more difficult to procure healing of any abrasion.

Dr. Stuart: You notice that the scar upon the face is in the supraorbital region. The case is rather rare, I think—at least I never saw one at the Lakeside Hospital in my three years' experience there, though Dr. Bruner tells me that there was one case of herpes zoster there in the early part of his service.

Dr. Oswald: What was the cause in this case?

Dr. Stuart: I do not know the cause.

Dr. Large: Is there any chance of recovery from this anesthesia?

Dr. Stuart: I cannot say, though I should think there was none—the literature of herpes zoster certainly gives no hope of recovery from the anesthesia.

Dr. Stern: Is the anesthesia only in the herpetic spots?

Dr. Stuart: Yes, the anesthesia is only in the spots covered by the eruption.

Dr. A. R. Baker: These cases must be exceedingly rare as I cannot recall having seen one in my private practice, although I saw several in the clinics in London and Vienna. Anesthesia of the cornea was a hobby of Professor Von Stelwag of Vienna, and he always commenced his examination of patients by touching the cornea with his finger to see if the patient would wink. I remember an amusing case in which the professor touched the cornea of his patient who did not wink. He turned to the class and delivered his usual lecture upon anesthesia of the cornea which lasted about an hour; in the meantime the patient, a woman, had taken the eye out and held it in her hand.

A paper of the evening on "Food Economics and Food Adulterations" was then given by Prof. Charles F. Mabery of Case School of Applied Sciences. This paper appears in this issue of THE GAZETTE.

CURTAILED REPORT OF THE PROCEEDINGS OF THE
ST. PAUL MEETING OF THE AMERICAN PROCTOLOGIC SOCIETY.

The third annual meeting of the American Proctologic Society was held at St. Paul, Minnesota, June 4th and 5th.

The meeting was called to order by the President, Dr. James P. Tuttle, New York. After the reading of the minutes of the previous meeting and receiving the treasurer's report the Society entered upon scientific business, abstract of which appears below.

At the conclusion of the scientific business the following officers were elected to serve during the coming year:

President, Dr. Thomas Charles Martin, Cleveland.

Vice-president, Dr. George J. Cook, Indianapolis.

Secretary-Treasurer, Dr. William M. Beach, Pittsburg.

Executive Council, Dr. J. M. Mathews, Louisville, Ky.; Dr. James P. Tuttle, New York; Dr. J. Rawson Pennington, Chicago.

Prof. Dr. Sonnenberg, Berlin, was elected to honorary membership in the Society on motion of Dr. William M. Beach, Pittsburg.

The Society adjourned to meet at Saratoga, New York, in June, 1902.

A paper entitled "Malignant Tumors of the Rectum," was presented by Dr. James P. Tuttle, New York City, N. Y.

In his consideration of this subject, the essayist divided them into four classes, Connective, Epithelial, Muscular and Irregular Tissue Growths.

It was stated that with those in his own practice, together with those mentioned in the literature of the subject, there were 29 of the melanotic type and 14 of the non-melanotic.

Sarcomas occur in the rectum as irregular deposits beneath the mucous membrane, in shape being round, elliptical, and sometimes resembling a hypertrophied tonsil. They rarely, if ever, assume the smooth plaque-like form of deposit such as is seen in carcinoma. The surface being always rough, unequal, "muriform," and the mucous membrane movable over the growth in its earliest stages, is a condition which distinguishes them from carcinoma.

They originate in the submucosa, and as they grow may appear as sessile tumors, and eventually develop a distinctly polypoid shape. They may also appear as a general fibrous thickening of the wall and be mistaken for a simple inflammatory stricture.

The mucous membrane covering sarcomas is comparatively normal, although if the tumor becomes very large the membrane may become congested, œdematous, or ulcerated, and even adherent to the growth through inflammatory processes. Sarcomas in the rectum may occur single or multiple, and vary in size from that of a hazel nut to a good-sized orange. One case reported was as large as a cocoanut.

Sarcomas of the rectum present a variety of colors, generally that of the normal mucous membrane, although sometimes they are dark red, grayish black, bright red, pale yellowish pink, or as black gangrenous masses. Often in the multiple form, the different tumors will present varying appearance.

Sarcomas may occur at any portion of the rectum or sigmoid, but the majority are situated low down near the anal margin.

Sarcomas differ from the carcinomas by their rapid growth. Differing from sarcomas in other portions of the body, these sarcomas are said to have a distinct tendency toward ganglionic infection.

Metastasis is one of the chief characteristics of sarcomas of the rectum. If the growth is primary, all possibility of metastatic deposit should be eliminated, or else the operation will be of no avail.

A complete resume of the histology was given under the following heads: round or globe cell sarcomas, spindle or fusiform, giant cell, alveolar, and mixed.

Melanosis does not alter the type of the tumor or change the character of its component parts. It takes place in all types and may involve but one part of a tumor, or only one or two tumors where they are present in multiple form.

Sarcomas of the intestine always develop from submucosa, and ordinarily do not affect the mucous membrane, until by pressure, tension, and ulceration, through friction and infection by the fecal mass, it may become involved. The causes and influences which bring about the production of sarcoma are as little known as those of carcinoma.

Age cannot be proved to have any direct influence, although it occurs more often late in life, and there is apparently no relationship between the sexes and this disease.

Symptoms are at first very vague. There may be a sense of fullness, or the feeling of the presence of a foreign body, or the first symptom may be bleeding and discharge of mucus.

The protrusion of sarcomatous tumors is more frequent than that of carcinoma, but less so than in other forms of rectal neoplasms.

There is no odor peculiar to sarcoma. After ulceration has occurred and there is a production of pus, the odor changes to that of decomposing tissue, but never assumes that peculiar, characteristic, and disgusting odor which is found in carcinoma of the rectum.

If the sarcoma is low down and involves the sphincter, producing traction and pressure, the patient may suffer considerable pain. But if it is high up and of an infiltrating form the patient may go to the very door of death without any knowledge of its existence.

The state of the bowels in sarcoma of the rectum varies according to the type of the tumor. There may be either constipation or diarrhœa. The latter may be caused by the mobility of the growth and its location near the margin of the anus. Constipation may be caused upon mechanical grounds.

Flatulence, indigestion, and loss of appetite are associated with sarcoma of the rectum as they are with all other neoplasms of this organ.

Cachexia is not well marked. Reflex digestive disturbances are noted. Decrease in strength, loss of flesh, swelling of the feet and abdomen rapidly succeed one another, when the sarcoma is once well developed.

Dysuria is frequently present. The lungs and pleura may become affected.

The diagnosis of this condition lies between carcinoma, and villous tumor. It is less sessile than carcinoma, and less pedunculated than adenoma. It is more firm than adenoma and has a less degree of induration than carcinoma.

In its attachment, its roots do not spread out producing that general infiltration of the mucous membrane that one finds in carcinoma. Its attachment is very abrupt. To the touch it is more undulating and irregular than carcinoma but has not the granular and dendritic divisions which one finds in villous tumor and in adenoma. The latter occur largely in children whereas sarcoma is a disease of middle or advanced life.

When it is a question between sarcoma and multiple adenoma, the multiplicity of the growths, the excessive diarrhœa, together with the comparatively fair condition of the patient's health, may be mentioned upon the side of adenoma.

Between sarcoma and carcinoma, the distinct odor of the latter is enough to make the decision positive.

In the early stages of the disease, the fact that the mucous membrane moves easily over the growth distinguishes it almost positively from carcinoma.

The final test depends upon the microscopic examination of a section from the real substance of the tumor itself.

Personally the reader was opposed to making an incision to obtain the section unless the case was an operable one and the patient consented to an operation if the microscopic examination showed a necessity for one.

The treatment of the disease consists in the radical removal of the growth. A ligature to pedunculated sarcomas ought never to be considered. If the growth is single and in the wall of the rectum a posterior proctotomy may be done. If it is diffuse, involving the entire circumference of the rectum, total excision of the organ is the only recourse.

While there is some evidence of the value of the serum therapy in the treatment of the sarcomas elsewhere, the advocates of this method lend no encouragement by their results in the treatment of this condition in the rectum.

Artificial ani may give great relief in carcinoma, but it neither relieves nor checks the progress of sarcoma.

The president, Dr. James P. Tuttle, New York, in his annual address, discussed the various phases as to whether or not it would be advisable for the American Proctologic Society to continue as an independent association or apply to the American Medical Association for admission as a proctologic section. He spoke at length of the advantages of meeting at the same time and place of the assembling of the great medical body. He spoke of the desirability of being brought into closer contact with the general profession from whom they had much to learn, and to whom many debts to pay.

The profession should be educated to realize the fact that there is more in proctology than they now believe.

The average practitioner's conception of this subject is that it consists in tying off piles, cutting through fistulas, and stretching the sphincter muscles for fissure.

Year after year, the speaker stated, men attended his clinics who said they were determined to make a specialty of Rectal Diseases. They expected to become accomplished specialists in

from three to six weeks. They wanted to see as many operations for piles as possible during that time. They didn't mind if a fistula or fissure was thrown in for good measure, but "piles" was their conception of proctology. The most carefully prepared lecture or demonstration of the new methods of diagnosis and the teaching of intestinal pathology are all lost upon them, for they are there to learn how to treat *rectal* diseases, i. e., *piles*.

When they have spent three or four weeks in this deep and profound study these men go back home full-fledged rectal specialists, and sometimes are made professors of the branch in some provincial college.

The speaker did not want for one moment to reflect upon those noble practitioners of general medicine, who attend post graduate schools intent upon learning how to diagnose and treat disease. All honor is given to these men who know their deficiencies; who sacrifice so much to keep abreast with the progress in medicine, and who go back to their homes and unpretentiously give their patients the benefits of the knowledge gained by honest study.

The essayist scored the mushroom specialist and the advertising charlatan who, he said, were molding public opinion upon proctology. They publish their advertisements and scatter their pamphlets everywhere, until the public commence to make their own diagnoses. The family doctor was said to be partially to blame for this condition of affairs, as he so often diagnoses these conditions without examination.

The advertising charlatan would have the public believe that the regular physicians never make a study of rectal diseases, that his instruments are patented, and that successful methods of treatment are known only to him.

The reader stated that it was the aim of the American Proctologic Society to show to the medical profession, and through it to the public, that there is something more in the subject, and questioned if there was a better way of accomplishing this than by interesting the A. M. A. sufficiently in it to establish a proctologic section, where they could meet the general practitioner, tell him what they are doing, and learn from him his needs.

The reader favored the attempt to organize a proctologic section.

Another point considered in the address was the qualifications for membership in the Society, and in closing the speaker said:

All over the country there are springing up specialists in rectal diseases, made by short terms of study at some post graduate school or by being elected professors of this branch in some small college. As a rule they are without experience or learning in the branch, and accept the position simply on account of the title and emoluments. On the other hand, there are a large number of general surgeons whose hospital appointments require their doing large amount of rectal surgery. The first class will be knocking at your doors for admission, but they bring no offerings in the fruits of their labors. The latter class will only come by invitation, but when they do, they will bring a rich experience and many practical observations gained in general surgery, but useful to the specialist.

Holding a chair in some little medical college does not entitle a man to membership in this society, and being a general surgeon or practitioner should not debar him. Let us select our members with such care that in the future we can never wish that this or that one had not been let in.

It was moved that the President's address should be open for discussion.

On motion of Dr. Martin, the chairman was authorized to appoint a committee to consider the president's address, and select a time for discussion. At a subsequent session the committee reported the following resolution:

REPORT OF COMMITTEE ON PRESIDENT TUTTLE'S ADDRESS.

Your committee would recommend that a vote of thanks be tendered Dr. Tuttle as a recognition of his valuable contribution to the literature of malignant diseases of the rectum.

Your committee are agreed that this time is inopportune for negotiation for admission to the Am. Md. Congress and that at present it is inadvisable to attempt the organization of a section on Proctology in the Am. Md. Ass'n, therefore we recommend the adoption of the President's suggestion, that our next meeting be at the time and place of the next meeting of the A. M. A.

JOS. M. MATHEWS,

THOS. CHAS. MARTIN,

Committee.

When the subject was opened for discussion President Tuttle moved the adoption of the resolution, thus reversing the opinion expressed in his paper. He had come to the conclusion that the interests of the specialty could be best subserved by remaining an independent society. Dr. J. M. Mathews of Louisville, Ky., also took this stand. After some further discussion the resolution was adopted as read.

(CONTINUED IN NEXT ISSUE.)

Correspondence.

Cedar Rapids, Iowa, May, 1901.

Editors Cleveland Medical Gazette:

The second regular session of the Roentgen Society of the United States will take place in Buffalo, N. Y., September 10-11, 1901, at the University of Buffalo.

We expect a large attendance on account of the Pan-American Exposition, and "excursion rates," which should insure the presence of every member of the professions.

The program for the meeting must go to press August 20th, and a manuscript copy of all papers to be read at the meeting must be in the Secretary's hand on that date in order to arrange the order of proceeding. No paper not forwarded before going to press can be entered in the program or read at the meeting.

Please send in the title of your paper not later than August 20th, and greatly oblige,

Yours fraternally,

J. RUDIS-JICINSKY.

Dr. Robert G. Schnee visited in Cuyahoga Falls for a few days during June.

Dr. Thomas Charles Martin was elected president of the American Proctologic Society at their recent meeting in St. Paul.

Dr. Koch intends, in connection with the German Colonial Office, to organize various expeditions into German Africa for the purpose of carrying on investigations into the origin of malaria. He will direct the work from Berlin.

The M. J. Breitenbach Co., 53 Warren street, New York City, representatives of Gude's Pepto-Mangan, most cordially invite all of the medical profession when visiting New York City to make their office a business home.

Physicians having patients not caring for the turmoil of hospital life, and who would appreciate the comforts of a private home in addition to hospital necessities and accommodations, may have them cared for by a graduate nurse in her own home, Ten years' experience in hospital and private nursing. Chronic cases accepted. Fine location. Best of references from first physicians. Telephone nurse at East 1184 W., or, address Trained Nurse, care of Cleveland Medical Gazette, 720 Rose Bldg.

THE Cleveland Medical Gazette

AUGUST, 1901.

Original Articles.

A CASE OF DERMATITIS EXFOLIATIVA NEONATORUM (RITTER).*

BY

A. RAVOGLI, M. D., CINCINNATI, O.

A disease under the name of dermatitis exfoliativa neonatorum was described by Ritter in 1870, as an affection of infants, which appears over the whole surface of the skin in the form of redness, swelling and exfoliation of the epidermis, without fever, and in most of the cases the end is fatal. The affection under different names had been described at different times by Boillard, v. Baer, Hervieux, Huetter, Bille, etc. It has great similarity in its clinical appearance to pemphigus foliaceus, with which it had been confused by G. Behrend. It affects infants in the first days of birth, usually in the second week, and in its clinical features may show some difference, which explains the different nomenclature given to this affection, as dermatitis erysipelatosa and then dermatitis exfoliativa by Ritter, pemphigus foliaceus by Behrend, and pemphigus neonatorum by many authors.

Before proceeding I will refer to the little which we know about the case which is the subject of our study.

The infant was a male and was born on March 4th, 1901, healthy and well nourished, at full term; the skin was clear and free from any eruption. On March 7th, three days after his birth, a red patch developed on the side of his chest, which soon turned into a kind of blister, and under feverish reaction the redness and the swelling extended over almost the entire body. By advice of a physician the infant was taken to the Hospital on March 10th at 4:00 o'clock in the evening, and died at 11:00 o'clock of the following day.

*Presented at the Ohio State Pediatric Society, Cincinnati, 7th May, 1901.

Status Pres.—The surface of the body had the same appearance as if it had been scalded showing a second degree burn. Fig. I and II. The epidermis in large shreds was detached from almost the entire body with the exception of the scalp, forehead and a few spots on the sternal region. Shreds of epidermis were hanging on the cheeks, around the mouth and the whole neck, forming in some places large bullæ filled with milky, turbid serum. The shoulders, the arms, the hands, the thighs, the legs and the feet were covered with shreds of epidermis, in some places hanging over the corpus mucosum with little serum beneath, in other places forming large pouches filled with seropurulent fluid. Both sides of the chest were more deeply affected with large bullæ, and the back was also covered with white, thick shreds hanging over the skin like rags of muslin.

The skin deprived of its epidermis was of an intense brown red color, and of pulpy appearance, as the corpus mucosum and the tips of the uncovered papillae were about the same in condition as if they had been maserated. For this reason the child could not have been easily handled, because the epidermis remained attached to the clothes and to the hands of the nurse. In other parts the epidermis was hanging in large patches adherent in the center with the edges rolled up.

At the time of admission to the Hospital the little patient had a temperature of 96 deg. F., pulse 140, scarcely perceptible. It was wrapped up in lint covered with vaseline containing 2 per cent. boracic acid, and then placed in a warm blanket to keep it warm. During the night the infant slept well and also took some nourishment; at 7:00 o'clock had a stool of yellow green color, and passed urine freely.

March 11th, when I saw the patient first, the pulse was scarcely perceptible; the photograph was taken, and a short time after it died.

Family History:—Both parents in good health, deny any venereal disease, and have never suffered from any skin eruption.

The mother has had seven children, the present being the seventh, of which one died in utero at the third month of gestation, the others were born at full term. Parents claim that the midwife who had attended the mother and the babe had attended a few days previously a case where the infant showed the same conditions. The midwife stated that she had nursed previously a child in that condition, who, however, had recovered, and she got an infected finger from it, and when she was attending the

child the subject of our study, she had what they call a run around, dermatitis ambuattonis bullosa. This statement would strengthen the views of Ritter (1), who has found this disease in a kind of epidemic, and to which he assigns pyogenic origin. In the same way the observation of Riehl (2), who in one case has found hyphomyceta, would indicate an infection and contagious disease, but the most of the authors have not yet pointed out the transmission of this disease from one to another.

On the contrary, Bohn, on account of the absence of fever in his cases, denies any infectiousness in this disease, and his views were accepted by Kaposi.

Boeck, the first who examined anatomically the skin, referred to an enormous enlargement of the blood vessels with an increased quantity of blood, together with infiltration of round cells (3). Kaposi established as the cause of this disease an increased physiological exfoliation of the epidermis. Bohn (4), Caspany (5), and Elliott (6) have also different opinions concerning the significance of the pathologic alterations of the dermatitis exfoliat. neon. So that the two first believe the process to be a true dermatitis in relation to the normal desquamation of the epidermis which naturally occurs at that age, while the last doubts the inflammatory nature of the disease.

The process has its seat in the epidermis and the hyperemia of the blood vessels of the chorium, and successive exudation would have, according to these authors, the result of detaching the epidermis. The others claim that there is no general inflammation of the chorium, but only an anomaly of the nutrition of the superficial layers of the skin, Rud Winternitz (7) refers to two cases, one of an infant, which died three days after the appearance of the disease. It is interesting that the mother had suffered with a purulent parametritis during the second pregnancy, and the second child showed a kind of an exanthema with bullæ the size of half a dollar, and the third child four days after birth was affected with dermatitis exfoliativa neonatorum.

In the other case the mother was very anaemic, but in normal general condition of health. It was the second child and was

- (1) *Central Zeitung für Kinderheilkunde*, B. II.
- (2) *Zur Kenntniss d. Pemphigus med.* Jahrbucher d. K. K. Gesell. der Ärzte. Wien 1885.
- (3) *Patholog. und Therapie der Hautkrankheiten.*
- (4) Quoted by Winternitz.
- (5) *Viertel. für Derm. und Syph.*, 1884.
- (6) *The American Journal of the Medical Sciences*, 1888.
- (7) *Archiv. für Dermatologie und Syphilographie*, 1898. B. XLIV.

born apparently healthy, with only a purulent discharge from the conjunctiva. On the fourth day the child was affected with fever and a redness developed around the mouth, the rash spreading over the whole body, and one and one-half day after it was already losing the epidermis.

The blood from both cases was inoculated on plates and blood serum and colonies developed consisting of staphylococci of the white and yellow kinds. A solution of the cultures was injected into the veins of a dog with the following result: The injection with the solution of the culture of staphylococcus pyogenes albus produced fever in the dog, and when injected in the subcutaneous tissue caused a simple swelling at the place of the injection. In consequence of the intravenous injection of two cub. cent. of the solution of the culture of the staphylococcus pyogenes aureus the dog died in collapse on the second day. On other dogs where the same solution had been injected under the skin, an abscess developed with a rising temperature. Inoculating the pus obtained from these abscesses on agar, a culture of staphylococcus pyogenes aureus was obtained. From these results Winternitz concluded that in the blood of the infant affected with this disease staphylococci were present, thus explaining the fever and the inflammatory process of the skin. In the animals subjected to the experiments it was found that when the blood was inoculated no positive result was obtained, showing that the micro-organisms had been disposed of in the system. In the infant's blood, however, staphylococci were constantly present, showing that new micro-organisms were constantly absorbed from the blood vessels of the chorium and carried into circulation on account of the deficiency of the epidermis.

The microscopic examination of the skin has shown the horny layer as a thin membrane and only in a few places could be found rows of flat nucleated cells. Beneath this a layer of nucleated cells forms a rudimentary stratum granulosum and the stratum mucosum has still some consistence. In places where the conditions the chorium were unchanged, the epidermis layers were not altered.

The alterations of the epidermis were the result of its loss. In some places the layer of unnucleated cells was only missing showing the free surface of the rete. In other places the rete itself had been removed, showing the tips of the papillæ. In other places also the appendages of the rete were missing and the papillary layer flat was exposed to the air.



Fig. I.



Fig. II

The epidermis scales under the microscope showed that they consisted of several layers of flat nucleated epidermis cells covered with detritus of unnucleated cells, blood corpuscles and micro-organisms. In the skin also deep fissures were found which extended to the papillary layer.

The blood vessels of the papillary layer are greatly enlarged, and this explains the issue of serum in the tissues and underneath the epidermis.

The connective tissue showed also interesting alterations. The papillæ were enlarged, probably as the result of the hyperæmia, and as a result of an œdematous condition. The spaces between fibers were much more pronounced, the fibers were not so undulated, and so in the papillæ and in the papillary layer effusion of blood and of serum is well perceptible. Round cells are found infiltrating the papillary and subpapillary blood vessels. In some places mast cells are also present. The most interesting feature is the enlargement of the blood vessels and of the lymph spaces.

On the free surface of the skin micrococci were freely found in heaps and from their form and size they were shown to be staphylococci.

The pathological alterations of the skin of infants affected with dermatitis exfoliativa neonatorum have been found by Winternitz to be analogous to those found in the skin affected with pemphigus bullæ. The œdema of the papillary and subpapillary layer in the pemphigus blebs has been found by Haight and du Mesnil, and Biehl, du Mesnil and Luitheln agree on the enlargement of the blood vessels. Eppinger has spoken of the effusion of blood around the blood vessels, and Unna and Luitheln have found blood corpuscles around the epithelial appendages of the rete.

From the pathological alterations of the skin as a consequence of dermatitis exfoliativa neonatorum and pemphigus, the same and identical process causes the detachment of the epidermis from the chorium. The whole process is due to hyperaemia and to the consequent exudation of serum from the chorium, raising in this way the epidermis in large bullæ. For this reason Winternitz denies the statement of Kaposi and of Caspary, considering this disease not at all due to an abnormal exfoliation of the epidermis, but due to a deep pathological process of the chorium of inflammatory nature. In the same way Luitheln (8) finds his ob-

servations to agree in general with those of Winternitz, hyperæmia, stasis and exudation, with some difference in the condition of the rete, which he believes to be the most interesting point for the production of this affection.

The first microscopic alteration to be seen in the skin is a diffused erythematous redness, which precedes the formation of the bullæ or of the exfoliation, showing that the exfoliation and the resulting bullæ are the consequence of the abundant exudation. The skin is infiltrated and swollen, and is liable to the formation of ragades, as the result of its infiltration. The fever which was found in one of the cases of Winternitz and in our own case in the beginning of the affection, the collapse which followed and produced death, the red livid color of the eruption, all show that dermatitis exfoliativa neonatorum is a disease of infectious nature. Ritter maintained it to be the result of a pyæmic condition, and Winternitz demonstrated the presence of the staphylococci in the blood of the patient. In my case the same midwife attended one case of this disease; she was infected herself with a dermatitis ambustionis, and a few days after the disease developed in the infant under consideration, strengthening the possibility of infection through contagion.

Luitheln speaks of the possibility of a toxic origin, which in our case is not very plausible. The infant born in perfect health had expelled the meconium, voided the urine, all functions seemed to be in perfect order. The autopsy, which was done a few hours after death by the Pathologist of the Hospital, Dr. A. T. Carson, did not reveal any alterations of the brain, heart, lungs, liver, spleen, kidneys, pancreas or intestines, all of which were found microscopically normal. In the microscopical examination by Dr. Rowe there was found a pronounced congestion with round celled infiltration of the lungs, kidneys and liver, like we have found in cases dead from pyæmic conditions. Furthermore the collapse which we have found in this case has some similarity to the collapse which we have observed in pyæmic affections. For the above reasons, in the case under consideration I would rather join in the opinion of Ritter, Winternitz, etc., than that of Kaposi, Caspary, Luitheln, etc., as we have had a probable transmission of the disease through the midwife.

I must say a few words in regard to the nomenclature of this disease as pemphigus neonatorum. In pemphigus the bullæ appear without a previous erythematous eruption, are round in shape, neatly limited, surrounded only by a small red halo. They

are nearly transparent, well distended and contain a clear fluid. In our case you can see from the illustrations that the bullæ are rather extended blisters, irregular, not limited, flabby, filled with turbid seropurulent fluid. For this reason the name of pemphigus has been discarded as a cause of confusion and that of dermatitis exfoliative neonatorum has been retained.

From the experience we had in the present case it seems to me that the prognosis of this disease is rather of a very serious nature. Many cases, however, have recovered. Of course a great deal in the prognosis depends upon the severity of the general symptoms and upon the extension of the exfoliation of the epidermis.

In regard to the treatment I should recommend internally good nutrition, and if collapse appears stimulants are indicated. Care should be given to the dress, which ought not to be too close to the skin, which is so tender and vulnerable that extensive excoriations are easily produced. When the inflammatory symptoms are present Ritter has recommended baths with some oak bark, and the application of salves, to keep the excoriated skin from contact with the air. After the inflammation has subsided, Luitheln recommends the application of salves or plasters containing ichthyol or resorcin or thiol, etc., which are keratoplastic remedies, capable of cornuifying the tender epidermis cells and covering the uncovered rete, giving in this way a chance to the young cells for a reproduction of the horny layer.

LABORATORY FEEDING, WITH ESPECIAL REFERENCE TO THE MODIFIED MILK FUND.*

BY

J. J. THOMAS, A. M., M. D.,

Visiting Physician, St. Anne's Infant Asylum and Maternity Home;
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Laboratory feeding may be justly said to be the latest development thus far attained in the process of evolution of the artificial feeding of infants.

Modified Milk, generally speaking, is no new thing, since as far back as 1854, nearly half a century ago, West, in his "Diseases of Children," says: "When cow's milk is given, it must be borne in mind that it contains more casein than human milk and less sugar, and that it is, therefore, necessary that it should be given in a diluted state and slightly sweetened. The degree

*Read before the Cuyahoga County Medical Society, Cleveland, 6th June, 1901.

of dilution must vary according to the infant's age. At first, the milk may be mixed with an equal quantity of water, but, as the child grows older, the proportion of water may be reduced to one-third." He also advises the addition of lime water, or prepared chalk to make the milk alkaline. He also furnishes tables, giving the comparative proportions of fluids, casein, butter, sugar and extractive matters and salts of cows' and woman's milk. According to these tables, the proportion of casein in woman's milk is about twice too high, while that of sugar is far too low. Since then a host of investigators have been engaged in the study of infant feeding, among whom may be especially mentioned Monti, Marfan, Biedert and Jacobi, who have added greatly to the knowledge of this intricate subject.

It was not until 1882, however, that the first great advance was made in infant feeding. In that year, Dr. A. V. Meigs, of Philadelphia, made known, for the first time, the accurate percentages of the various constituents of human milk, especially as to the proteids, the percentage of which had previously been made too high.

His father, Dr. J. F. Meigs, had so far improved upon previous methods as to make use of certain combinations of milk, cream, lime water, milk sugar and water, which, from a large clinical experience, seemed to him best suited to the average infant. Dr. A. V. Meigs, by the advice of his father, undertook to determine chemically how closely this mixture compared with his analysis of human milk previously made. The results showed, that the mixture contained 1 per cent. of albuminoids, corresponding exactly with the percentage of albuminoids he had found in human milk. He then improved the original formula and, with the ingredients in the proportion of 1 part milk, 2 parts cream, 2 parts lime water and 3 parts sugar water, he obtained a mixture practically always showing the following proportions: 88.35 water, 3.50 fat, 1.21 albuminoids, 6.66 sugar and .25 ash. This was called Meig's Mixture, but was considered a food, and not a flexible method of infant feeding. This was a distinct advance over the previous methods of simple dilutions of cow's milk with water, lime water, or cereals, as, according to Dr. F. W. White, it brought to the attention of the medical profession three very important points in regard to substitute feeding. (1) That simple dilutions of milk were irrational in that all ingredients were reduced alike; (2) That a milk should be modified to resemble human milk; (3) That Meig's formula expressed for the first

time, the idea of a percentage basis in the modification of milk. From this basis, many mixtures of cream, milk, sugar, and lime water were produced, all corresponding more or less to the originator's idea of the proper proportions found in human milk. While these various mixtures seemed to agree with the average infant, they did not with all, so in particular cases, endeavors were made to find the proper mixture by the empirical method of increasing or decreasing now this, now that, or all the ingredients together. It was a crude method, since the reasons why certain mixtures did not agree were not at all understood. And, besides, the milk supply could not at all be depended upon either as to its strength or its purity. There was no way of knowing the percentage strength of the cream and milk used in carrying out the directions given, as this was liable to vary from day to day, and milk of all sorts and conditions was used. This, of course, is just as true today, in regard to the average daily milk supply of our cities. Then, too, there was no method by which accurate results could be obtained in altering the strength of the fat or proteids separately. If it was decided that the mixture caused fat indigestion, the cream could be diminished, but this, at the same time, diminished the proteids and if this was corrected, then the fats were increased. Into what a hopeless maze this led can be easily appreciated by anyone familiar with the percentage system, who endeavors to adapt a mixture to an obstinate infant's stomach by the old empirical method.

To Dr. T. M. Rotch, of Boston, belongs the honor of solving, in great measure, the difficult problems that had baffled pediatricists for so many years, and of establishing on a scientific basis the artificial or substitute feeding of infants. He was the first to perceive and realize the important germinal idea in the principle established by Meigs, only awaiting some genius like his to develop it. The results of his discovery and labors were announced to the profession in 1890, when he made the suggestion that all modifications of milk should be expressed in percentages of fat, sugar and proteids, and that prescriptions should be written for precise proportions of the different ingredients.

The further development of this idea and the necessity for great accuracy in the modification and the absolute control of the purity and strength of the milk supply, led to the establishment of the first modified milk laboratory, in Boston, in 1891. Since then laboratories have been established in 12 other cities of the United States, besides three in Canada and one in London. This

sufficiently attests the favor with which the method has been received. Under the management of Messrs. Walker and Gordon, whose names the laboratories bear, working under the scientific direction of Rotch, the system has been developed to an extent little dreamed of in the beginning, so that it is now possible for a physician to obtain any combination he may wish, and to have his directions carried out with the same accuracy with which his prescriptions are filled at the drug store. The laboratory company in each city has its own farm, or one under its immediate control, thus having direct oversight over the breeding, care and food of the cows and the handling and transportation of the milk. In this way only can a milk supply be obtained, guaranteed as to its purity, freshness and cleanliness. The farm controlled by the Walker-Gordon laboratory of this city is at Wellington, about 40 miles from Cleveland. A description of the methods carried out at this farm, as observed by the writer on a recent visit, through the courtesy of the manager, Mr. C. W. Horr, may be of interest. The writer enjoys the distinction of being the first physician who has ever visited the farm, but a cordial welcome is assured to anyone who comes, and he will surely be well repaid. The milk is obtained from a herd of pure Holstein-Friesian cows, a breed that has been found best suited for the purpose. At present the herd numbers 22, but this number varies according to the needs of the laboratory, the entire supply being sent twice daily to the laboratory.

These cows are all tuberculin tested and are absolutely healthy. They receive the same care as a thoroughbred horse. Their food is scientifically regulated, consisting of two meals daily in summer, of bran two-thirds, gluten one-third, four and one-half pounds to the feeding, and three meals a day in winter. In addition, they receive a plentiful supply of good grass in summer and ensilage and hay in winter. They drink pure rain water, except when at pasture, when the supply is obtained from a running brook. The yield of milk from these cows shows a smaller percentage of fat compared with other breeds, but this, of course, is of no importance in laboratory feeding. The fats and proteids average about 3 per cent. The fat globules are very small and evenly distributed and the emulsion is perfect. The milk from each cow is weighed at each milking and an accurate record is kept. The daily yield is the surest index to a cow's health and if any deficiency is shown, the cow is immediately removed from the herd and a healthy one substituted. Thus the purity of the

milk is assured. The stable is above ground, thus being perfectly dry, and is arranged to insure plenty of light and air. The drainage is perfect and the floors are frequently sprinkled with water to guard against dust. Perfect cleanliness is the watchword in every detail. If any illness develops in a milker or his family, he is immediately relieved from duty.

Before the milking, the cows' udders are carefully cleansed with water, then the milkers put on fresh laundered jackets and wash their hands thoroughly with soap and warm water. After each cow is milked, the milk is carried immediately to the milk-house, which is separated at some distance from the stable and which is kept perfectly clean and free from dust. Here the milk is poured through several layers of sterilized gauze into the aerator and cooler, an ingenious contrivance which cools the milk within four minutes to 40 deg. F. A large pan, into which the milk is poured, surmounts the apex of a hollow conical pan filled with ice water. Through innumerable fine holes in the bottom of the first pan, the milk trickles in fine streams upon the surface of the cone near the apex. The milk flows to the bottom of this cone in a fine sheet over the icy surface, thus being immediately cooled. It then runs through several layers of gauze into the cans, which, as soon as filled, are sealed and placed in ice water. As soon as the milking is completed the cans are taken to the train and the milk reaches the laboratory within four hours from the time milking was begun.

Except in very hot weather, it is found unnecessary to pack the cans in ice, as there is a very slight rise in the temperature of the milk during transit. Repeated bacteriological examinations of milk thus tested have shown that it arrives at the laboratory practically sterile.

On reaching its destination, the milk is placed at once in the separator, revolving at the rate of 6,000 revolutions a minute. This separates the cream, by centrifugal force, from the milk, the former having 32 per cent of fat, the latter .13 per cent. Any foreign substance that may be in the milk, with mucous, blood, etc., remains in the separator.

The details of recombining the cream and separated milk, to fill prescriptions calling for any percentage of ingredients, accord with the admirable description given by Dr. Rotch in his "Pediatrics."

The advantages to the physician of the laboratory are many. It supplies him with a milk of guaranteed purity. The different

constituents of milk may be varied separately at pleasure, according to the judgment of the physician. Accuracy in modification is assured. The time and trouble required in calculating amounts for home modification, with its necessarily approximate results, are saved.

However, the functions of the laboratory are by no means limited to filling prescriptions calling for percentages of fat, sugar and proteids. Anything the physician desires and prescribes will be added, be it cereals, mineral matters, malt, pancreatin, or patent foods. The physician may use his own discretion as to whether he will have the milk sterilized, pasteurized or raw. Besides modified milk, plain or nursery milk can be obtained, raw or heated, and also cream of any desired percentage. Gravity cream will be supplied if preference is had for this rather than separated cream. This is of decided advantage in those numerous cases in which it is necessary to resort to home modification, on account of the prohibitory expense of milk modified at the laboratory. In this way only can accuracy and purity be assured, at least at present.

As the result of investigations carried out by Drs. F. W. White and Maynard Ladd, of Harvard University, recently published, the laboratories are now prepared to still further modify the proteids, by dividing them into whey proteids and caseinogen and recombining them in the proportions in which they are found in human milk. Of the total proteids in cow's milk, approximately three-fourths is caseinogen and one-fourth whey proteids, according to these investigations. Previous analyses gave a higher ratio of caseinogen to whey proteids. In woman's milk the ratio is two-thirds whey proteids to one-third caseinogen. The results of these investigations are summarized by Dr. White as follows: "By the use of whey as a diluent of cream of various strengths, we are able to modify cow's milk so that its proportions of caseinogen and whey proteids will correspond to the proportions present in human milk. We therefore render it much more digestible and suitable for infant feeding. On the basis of these analyses, we are able to obtain whey cream mixtures, with a maximum of .90 per cent. and a minimum of .25 per cent. of whey proteids in combination with percentages of caseinogen varying from .25 per cent. to 1.00 per cent; of fat from 1 per cent. to 4 per cent; of milk sugar from 4 per cent. to 7 per cent." As the proteids are the chief source of trouble in feeding young and delicate infants, it would seem that this marks an important advance in laboratory feeding.

The laboratory company in this city will soon be prepared to make analyses of mother's milk for the physicians free of charge. This will be of advantage many times, especially in those cases, which are becoming more and more frequent, in which mixed feeding has to be resorted to, owing to the insufficient supply of breast milk, the quality at the same time being suitable. The analysis in these cases is a valuable guide to the proper proportions of the modified milk, and in those cases in which breast feeding must be given up temporarily or entirely, on account of an acute illness of the mother. Thus the substitute can be modified in the proper proportions at once, avoiding the frequent alterations usually found necessary where no analysis of the mother's milk has been made.

The only valid objection to laboratory modified milk is on the ground of expense, from 40 to 60 cents daily, which will prohibit its use in many cases. This is, of course, an objection that can not be surmounted, since the care and skill required in the many details of preparation will always entail great expense. Still even when the cost prevents its continuous use, there is great advantage in its use for a few weeks, in cases of acute gastro-intestinal disturbances, especially during the heated term.

The objection that recombining separated milk and cream gives a product unlike the original milk emulsion has been proved groundless by several investigators who have shown that there is no appreciable difference between the emulsions obtained from gravity cream, centrifugal cream, whey or barley water mixtures.

The general principles to be observed in laboratory feeding are, of course, those of percentage feeding in general. The most important indications according to which the percentages of fat, sugar and proteids are to be varied are summarized by Holt as follows: "If not gaining in weight without special signs of indigestion, increase the percentages of all the ingredients. If habitual colic, diminish the proteids, for frequent vomiting soon after feeding, reduce the quantity, for the regurgitation of sour masses of food, reduce the fat, and sometimes also the proteids, for obstinate constipation, increase both fat and proteids."

It is a good rule to begin with very young infants, with low percentages, especially of the proteids, which should not be above .50 per cent for the first two weeks of life, and some authorities say .25. Fats and sugar should be also moderately low, about 2 per cent. for the former and 5 per cent. for the latter. Of course, much older children sometimes require these low percentages, but for a

short time only. Sometimes a child does not gain in weight without any sign of indigestion, not because the proportions are unsuitable, but because the quantity is insufficient. On the other hand, there is no reason to increase the strength of the food when the child is gaining sufficiently in weight. These are a few of the rules for guidance in percentage feeding. Of course, many times the child is a law unto itself and the conduct of its feeding must be governed largely by experience. In no field of medicine are general rules less to be relied upon.

The modified milk fund, to which reference is made in the title of this paper, is a fund raised by voluntary subscription through the efforts of Miss Edith Dickman, for the purpose of supplying laboratory modified milk to the infants of the worthy poor, during the summer months of July, August and September. The work was begun in 1899. During that summer 50 infants were supplied and during the same period of 1900, the number was 62, many receiving the milk during the entire season, others only a part of the time. Most of the milk was supplied free of charge, but in many cases the parents paid such sums as they felt able to. Among this total of 112 infants, there were eight deaths, or about 7 per cent. Of this number, three were moribund when put upon the milk, dying within a day or two after. Another died of tuberculosis six weeks after birth, its mother having died of the same trouble two weeks previously. Two were suffering with severe grades of marasmus complicated with entero-colitis when first seen and subsequently died of these diseases. Two others died of pneumonia.

The character of the patients and their surroundings offered the severest test to any method of feeding, and the fact that the mortality was only 7 per cent, while that of all infants artificially fed is over 50 per cent, speaks volumes for this method of feeding.

The patients were recruited, for the most part, from the poorest quarters of the city, with surroundings which make infant life truly a battle in which only the fittest survive. Nearly every child was suffering from some form of digestive disturbance when first put upon the milk, although, in a few instances, the infants were perfectly well. These, however, were breast fed, but the mother's milk was insufficient or had given out. In nearly every instance, various artificial foods had been tried, often with success until the hot weather arrived, when trouble began. In not a few cases, straight cow's milk had been given to young infants, invariably with disastrous results. Several children over a year old

were presented, suffering from fermental diarrhoea, resulting from the use of raw corner-grocery milk, who immediately recovered on pasteurized nursery milk from the laboratory. In no case had any attempt apparently been made to feed the infants according to modern scientific methods.

Many difficulties and annoyances were met with in the work. It was frequently impossible to get mothers to return with their children or to make any report. However, as far as possible cases were followed up and visited personally or by the nurse stationed at the Goodrich House and the nurses of the city who kindly volunteered. A mother rarely knew the weight of her child and it was difficult to make mothers understand the importance of frequently weighing the child. Mothers or relatives often applied without bringing the patient, and sometimes those who came knew absolutely nothing about the child or its condition. They expected to take so much milk home in a bottle. Again, if the first prescription did not immediately prove suitable, the milk was sometimes stopped and some other food substituted. Usually, however, in such instances, in a few days a request came for a renewal. In spite of all these adverse conditions, however, the results have been gratifying in the extreme.

Headquarters were established at the Goodrich House, where most of the cases were treated. In addition, cases were treated at the Lakeside and General Hospital dispensaries. The work will be continued this year under the same conditions. Most of the cases treated were suffering from the form of intestinal disturbance conveniently called fermental diarrhoea, usually of a few days' duration, but in a number of cases of two or more weeks' duration. These cases almost invariably showed marked improvement within two or three days and continued in good health during the time they were on the milk.

Several cases of marasmus complicated either with fermental diarrhoea, or entero-colitis, were treated with considerable success, several being entirely cured and the rest, with the exceptions noted, showing marked improvement.

A typical case of fermental diarrhoea was the following: Child three months old, first seen August 16, 1899, suffering with fermental diarrhoea of one week duration. Had previously been well. Was breast fed. Was well until mother fed it tea and cake at table, besides bread. Phys. Ex. Neg. P. and T. N. Wt. $13\frac{1}{2}$ lbs. Prescription for Fat 3.50—S. 6.50, A. 1.00, No. 7, Oz. $3\frac{3}{4}$ given. Three days later, much improved. Five days later, patient doing

well. Vomited only after breast nursing. Wt. $14\frac{1}{2}$ lbs. Percentages increased to F. 3.75, S. 6.50, A. 1.25, No. 7, Oz. $4\frac{1}{4}$, Alk. 7 per cent, 167 deg. Breast feeding cut down to 2. August 30, child weighed $15\frac{3}{4}$ lbs., but lost $\frac{3}{4}$ lb. by September 7, due to attack of fermental diarrhoea, probably due to mother feeding child with nipple and tube. Ordinary nipple substituted and child did very well, except for attack of what was said to be spinal meningitis late in September. This child was kept on milk until November 1st, with gradual increase of percentages. At that time child weighed $17\frac{3}{4}$ lbs. Following are the R's:

F. 3.50	S. 6.50	A. 1.
3.75	6.50	1.25
3.75	6.50	1.00
3.75	6.50	1.25
3.75	6.50	1.50
3.75	6.50	1.75

This child was fed on Home Modified Milk during the following winter and when last seen, during the summer of 1900, was perfectly well.

An interesting case was that of a patient four months old, first seen Aug. 2, 1900, suffering with marasmus of severe grade, with gastro-enteric catarrh of two months' duration. The mother had had nine children, seven of whom died in infancy, the patient and one brother surviving. Patient had been fed on malted milk since one month of age, with three breast feedings during the day, and several each night. Vomiting occurred after each feeding. Attacks of diarrhoea were frequent, attended with green stools of foul odor. Two weeks previously discharges contained mucus and blood. Weight at this time and at birth not known. Following prescription was given: F. 250, S. 6.00, A. .75, 8 feedings, $4\frac{1}{2}$ oz., alk. 5., 167 degrees. Breast feedings, limited to two daily. Improvement was marked from the first. For two weeks there was some vomiting of curdled milk and some curdled stools, but diarrhoea was much less frequent. Aug. 9 weight was eleven pounds. At end of two weeks, Aug. 14, digestion had become normal and there was a gain of eight ounces. Progress was uninterrupted until end of September, when milk was stopped. Weight was then thirteen and one-half pounds. Percentages had been gradually increased to fat 3.75, S. 7.00, A. 1.50, 9 feedings, $5\frac{1}{2}$ oz. each. After modified milk was stopped, attempts were made by the mother to feed the child on milk and water mixtures, using ordinary milk. Change for the worse immediately took place, and in three weeks child had failed greatly, having

a return of the old symptoms. Arrangements were then made with the laboratory Co. to supply child at greatly reduced cost and prescription for F. 3.50, S. 7, A. 125, No. 7, oz. 6 was given. Child recovered at once and began to gain. Dec. 2 weight was seventeen pounds, but patient was troubled with constipation. There was no vomiting. R. changed to F. 4, S. 6.50, A. 1.75 oz. 6½. Dec. 29 weight was nineteen pounds. Since then progress has been uninterrupted and when last heard from child was in perfect health.

Many more such cases as these could be cited did space permit, but sufficient has been said to indicate the great success attained with laboratory feeding under the most severe and trying conditions to which it could be subjected.

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SUBSTITUTE FEEDING OF CHILDREN.*

BY

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The substitution of an infant food either before or at the time generally set for weaning, is a problem not to be too lightly considered. The only argument a physician should allow to influence him to make such change, before the seventh month, is, that the child's growth is not normal or that it is liable to contamination with disease by partaking of its mother milk.

In the first condition, when the child does not make satisfactory progress at the breast, the physician must first of all examine the breast, noting its size, etc., and if the milk is readily discharged from the nipple. Next, the mouth of the child should be carefully examined for catarrhal conditions of the mucous membrane, stomatitis, aphthæ, thrush, caries or a cellulitis in the neighborhood of the maxillary bones, cracked lips, cleft palate and hare lip, also

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diseases causing stoppage of nose, should be remedied if found, for they all interfere with nursing. Also notice should be taken if the muscular structures of the mouth are powerful enough to perform the function of a suction pump, which it really is. Then the child should be looked over thoroughly for the chronic constitutional diseases, rachitis, scrofula, tuberculosis and syphilis. If thorough examination reveals nothing in the child to account for its failure to gain in weight and strength, and the physician has assured himself that the diet has been given in proper quantity and at regular intervals, it is well to examine the milk; but it is well to remember the fluctuations mothers' milk is liable to undergo, that an analysis undertaken today might lead to condemnation of a milk that was perfect yesterday and may again be tomorrow. Chemical examination is uncertain on this account and again because one child will thrive upon a milk which would cause another to waste away. The single chemical analysis is really of little value, but if done day after day we may derive some really valuable information.

The real criterion is the constant weighing of a child; an infant that does not gain in weight day by day as it should, and is otherwise perfectly healthy, demands a change of diet. Then comes the difficulty of deciding what is the best substitute. Naturally for a child at the breast it would be reasonable to suppose that the milk of another woman in the same period of lactation would be preferable beyond all others. If a woman of such kind be available with an healthy child, or one whose child had died shortly before, she should be employed, always remembering that she must be in perfect physical condition, so slight a thing as a limited eczema, or slight enlargement of the liver or spleen making her employment dubious. Sociological conditions among us usually render this method impossible and cause us to seek the next best substitute for mother's milk, a substitute as nearly alike in both kind and proportion of constituents. This is to be sought among those mammalian animals nearest at hand, and such is undoubtedly the cow.

Analysis shows cow's milk to contain more albumen and salts, and less fat and sugar than human milk.

The efforts of everybody engaged in the study of the dietetics of children have been engaged in the equalizing of these differences, and although they themselves are aware of the fact that while they have only succeeded in modifying cow's milk to agree with human milk in percentage of constituents, they have left the

chemical characteristics of the individual constituents (fat, albumen and salts) unchanged. Every method as yet suggested has for its basic principle dilution to bring the albumen down to the standard of human milk, viz., 2 per cent. This is readily done, but the great disparity in the ratio of casein, the insoluble albumen, to the soluble lact-albumen, remains as before, and it is just this preponderance of casein in cow's milk that is supposed to cause difficulties in feeding.

In diluting the percentage of fats is also reduced, but far below the standard of human milk. This is apparently easily overcome by adding cream in sufficient quantity to bring it to 4 per cent. But this represents 4 per cent. of fat quite different in identity than that of mother's milk; it is of different specific gravity, melts and congeals at different temperature, contains volatile fatty acids to a greater extent and fatty acids not found in the fat of human milk at all.

The deficiency in sugar is remedied by simple addition of milk and sugar in correct quantities. The sugars of both kinds of milk are probably identical.

The methods of modification most used by our practitioners are:

1. Simple dilution with water and addition of milk sugar.
2. Dilution with a cereal infusion.
3. The cream mixtures.
4. The method advocated by Rotch and made possible by the establishment of milk laboratories of the Walker-Gordon type.
5. The predigested milks.

The first method, that of adding water and milk sugar in proper proportion is among the oldest; it is still used by a great many pediatricians, notably Baginsky. Its advantages are its cheapness (although Rotch deprecates the idea of economy being observed in infant feeding; the experience of the writer is that economy is in the vast majority of cases the prime indication in directing an infant's diet) its simplicity of preparation and that the children thrive and get along in weight, as well as with any other method.

The objections to it are based upon calculations showing that from the first to the seventh week the child receives a deficiency of albumens as compared to breast milk, this becoming equalized and remaining so until the end of the fifth month, and then becoming greater in quantity. The amount of fats received is less than in breast milk. But these calculations, impressive as they are

when printed, lose their importance when one sees children fed by this method thrive and gain in body weight as do those nourished by other means.

The second method of diluting with cereal infusions does not find much favor with pediatricians. It is of great value as a therapeutic measure in certain gastro-intestinal disorders, but when given routinely to children under four months it causes meteorism, severe colic, and if continued will induce aggravating dyspepsias and rickets. The claim that the casein of milk so treated coagulates in finer floculi than when water alone is added, is disproved by test tube experiments, but in the stomach it is possible the gelatinous substance allows the gastric juice to attack the milk less quickly, hence causing a finer curd.

Here might be mentioned the diluting with infusions of anise, fennel, etc. The only influence they have on digestion is occasioned by irritating the mucous membrane of the stomach, causing probably an increased flow of gastric juice, but if continued induce gastritis. They hardly have a place in pediatrics, and should be rarely if ever used.

The third method, embracing cream mixtures, has to contend with the difficulty of obtaining pure sweet cream. Most cream is obtained by skimming, after allowing the milk to stand for a period of from 6 to 24 hours; such material is unfit for feeding. Even when pure cream is obtainable the manipulation required to carry it out renders it useless in a great many cases.

The fourth method, as advocated by Rotch, has no extraordinary advantages. It is true that he obtains a milk identical, in proportion of constituent, to mother's milk, but the chemical differences of these constituents is quite as marked as when he began to modify. Its field is limited to those cities where milk laboratories are established and to people who can afford to buy an expensive food. For the home preparation of this food the argument advanced against cream mixtures holds good. Without a doubt Rotch has better results since he has inaugurated his method, but I do not attribute it to the method of modification so much as to the material he has to modify, namely, the milk which is handled with such scrupulous care as to be almost sterile when drunk by the child.

5. The predigested or partially predigested foods should never be used as a routine or normal food for a healthy child; they are sometimes indicated in pathological conditions, but when administered as a regular diet cause an alarming number of cases of severe anæmias and rachitis.

Considering the methods mentioned and the host of others that are advanced—some advocating diluted milk, others administering highly concentrated milk, while Budin and Variot extol the results they obtain by giving full milk to the youngest child. One authority insists upon making the proportions of the individual constituents of the modified product agree exactly with those of human milk. The other insists that a deficiency in fat may be made good by adding an excess of sugar; or replacing fats with albumen. This one insists that a vegetable element is essential; the other decries it as being the height of folly and dangerous, and so the poor practitioner is lead into a maze from which he extricates himself with difficulty.

After having perused the different ideas and having seen many of them applied by the authors themselves and noted the uniform good results obtained, the writer is led to believe that the most essential points of infant feeding are first of all to obtain a clean milk, and by a clean milk is meant a milk obtained from healthy animals, treated from the time of its derivation until time of administration with a technique akin to that employed in modern surgery. It must be within the reach especially of the poor, for it is this class of people that so swells the alarming mortality rate of children under one and one-half years—it must also undergo modification suitable for all classes and conditions. The simple dilution with water and addition of milk sugar will be found the most convenient, and giving results equal to any other method; and, finally, the feeding must be pursued under intelligent direction, and this director's greatest efforts are usually consumed in insisting upon having a perfectly clean milk, administered in proper quantities and proper intervals.

THE FEEDING OF CHILDREN AFTER THE FIRST YEAR.*

BY

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In the almost perennial discussions in households over the question of giving some certain article of food to the baby, this expression (usually delivered with an air of finality by some fond grandparent), is only too often overheard: "Why not let him have it? It won't hurt him." The question which apparently appeals

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most strongly to the mind of the sympathetic mother or the interested relative is not what will do the child good, but what will not do him harm. In other words, instead of relying on a few simple articles of food, the beneficial action of which has been established by the test of general and frequent use, the digestive and assimilative capacity of the child is not unfrequently overtaxed by articles of diet which, if not actually deleterious, are of no positive benefit. The inevitable result is an absolute loss in the physical economy. From a consideration of the high percentage of illness attributable solely to some error in diet, one is forced to the conclusion that various articles of food assumed to be harmless, actually cause much trouble. That an "ounce of prevention is worth a pound of cure," is certainly true in the feeding of children.

At the present time with the abandonment of the grandmother theory and the adoption of scientific methods, much is being accomplished by careful physicians and intelligent mothers in the selection and proper preparation of a food modified to suit the needs of the individual infant throughout the first year, or up to the weaning age; and by weaning let us mean broadly that time when the infant ceases to take its nourishment from the mother, or to use milk modified at home or in the laboratory, or to depend upon any of the so-called baby foods. Healthy babies should be weaned at the age of twelve months. Circumstances may arise which will necessitate a change before that time, but it is seldom advantageous to continue nursing or the use of modified milk beyond that period. The weaning of healthy children is better done gradually, giving at first one bottle daily, then two bottles, and so on, and in the course of a few weeks accustoming the child to take its nourishment with a spoon, and by drinking from a cup.

The harmful methods of feeding after the first year, mentioned only to condemn them, may be generalized in two classes:

First, keeping the child for the greater part, or possibly the whole of the second year upon the food used during the first year, that is, prolonging lactation, or continuing the use of modified milk, or the proprietary foods; and, second, after weaning, allowing or encouraging the child to eat practically everything found in the dietary of an adult, without regard to the improbability of mastication or the feeble power of digestion in the young child. It seems to me that the same care and vigilance should be observed in the dietary of older children as is insisted upon

in the case of infants during the first year, and since, as has been noted, a large percentage of the ills of childhood can be traced directly to some error in diet, it would seem not only advantageous, but absolutely essential, for the physician to give to the mother whose judgment may be otherwise excellent, a few simple but well-defined rules concerning the care and feeding of children after the first year.

After the ninth month, a child should have five feedings at three hour intervals during the day, and should sleep without waking or feeding from 6 P. M. to 6 A. M. No change is made in the number or intervals of feedings during the second and oftentimes during the third year. Occasionally, however, as early as the fifteenth or sixteenth month, the child will regularly refuse one of the five feedings, upon which occurrence it is advisable to give but four feedings daily, at 6 A. M., 10 A. M., 2 P. M., and 6 P. M.

Throughout the period of childhood regularity in feeding should be the first principle. Next to improper food, irregularity in the time of feeding is an evil largely practiced by indulgent mothers or nurses, who proceed on the theory that a crying child is necessarily a hungry child.

One thing is insisted upon, namely, that milk be the basis of diet up to the sixth year, the prevailing tendency being to give solid food too early and in too large quantities.

The first half of the second year the child requires daily from forty to fifty ounces of fluid food. The first change in diet consists in substituting for one of the milk feedings a combination of oatmeal jelly with an equal amount of cows' milk, warmed and salted to taste, and after a day or two, giving two feedings daily of the oatmeal jelly and milk. Thus a menu for the thirteenth month might be made up as follows: 6 A. M., milk; 9 A. M., oatmeal jelly and milk; 12 M., milk; 3 P. M., oatmeal jelly and milk; 6 P. M., milk.

Some authorities advocate the use of a tablespoonful of beef juice, slightly warmed and salted, given with the third meal, but meat juice ordinarily, is improperly prepared, and personally, I do not recommend it. About the fourteenth month, stale bread, that is at least one day old, soaked in the milk, may be added to the first and fifth feedings, and orange juice, from one-half to two ounces daily, a half-hour before the second feeding may be given with advantage.

The value of fruit as an article of diet for children, is too often overlooked and recourse is had to castor oil, castoria, or cascara, when the judicious use of fresh fruit or cream would accomplish like results, and certainly would be more palatable. Apples, peeled, cored, baked very soft, and without sugar, or prunes, stewed soft, and put through a sieve to remove the skins, may alternate with orange juice.

With the fifteenth month, broths, made of chicken or mutton, may be given advantageously as the third meal, with a portion of stale bread, or a tablespoon or two of thoroughly cooked rice.

As the child takes more solid food, constipation not infrequently becomes an occasion of distress. Under such circumstances cream added to the oatmeal jelly and milk, or to the bread and milk, or even to the broth, with an increase in the amount of fruit, will obviate this difficulty.

Usually at the seventeenth month, a baked potato, prepared with cream and a little salt, gives the midday meal an added relish, and beginning with the eighteenth month, a soft boiled egg, not oftener than once or twice a week, will be easily digested.

Varying the articles already mentioned, substituting barley or wheat jelly for the oatmeal; giving one day chicken and another mutton broth and giving the baked apple, orange juice, or prunes on consecutive days, will satisfy all the needs of the baby to the third year.

During the third year, strained vegetable broths may be given occasionally in place of the meat broths, and apple sauce made with little or no sugar, ripe peaches in season, asparagus tips, summer squash and tender, fresh peas, mashed, may be added to the list of fruits and vegetables. Bread and milk, and some form of farinaceous food, will still be the basis of the first, second, fourth and fifth meals, giving the broths, potato, egg and vegetable with the third meal.

We are now confronted with the question of dessert. Certainly the simpler the dessert, the better. Not having acquired a taste for highly seasoned and complicated food, the child is nourished and satisfied with a plain, simple diet. It is my custom to allow as desserts up to the fifth year, applesauce, some ripe seedless fruit with cream, junket and cream, rice pudding, made without sugar or raisins, but eaten with cream or a simple custard of egg and milk, and occasionally, during the fourth and fifth years, ice cream.

During the fourth year, at the noonday meal, which should be the substantial one of the day, the menu may consist of a small quantity of finely minced chicken, underdone roast beef, beefsteak, lamb chops or roast lamb with bread and butter, potato, a vegetable and a simple dessert. The substantial ingredients of this meal, demanding a longer digestive period, than the diet of the preceding year minimize the importance of the second and fourth feedings, which may now consist of a cup of milk with a cracker in the middle of the morning and afternoon.

Fish, with the bones removed; ripe fruit in season, as cantaloupe, peaches, pears, plums and grapes with the skins and seeds removed, with stewed celery, mashed potato with a little gravy, not very fat, added to the articles in the above list, will furnish a sufficient variety for the child up to the fifth year.

Filtered water, or water otherwise purified, should be allowed freely between meals, and may be administered during the night in case of continued wakefulness or crying. Water and milk should be the only beverages of the growing child.

Throughout the fifth year much the same diet will be prescribed, with possibly a further variation in the meats and vegetables.

The normal child whose feeding is restricted to the dietary here suggested, whose foods are properly prepared according to the recipes given below, whose appetite has not been vitiated by the use of unwholesome sweets, cake, pie, tea and coffee, will eat his meals with a relish and assimilate his food with the minimum of waste. And the quantity of his consumption, under such circumstances, may be left safely to his natural inclination.

In the preparation of this paper, confined to the feeding of children, it has been everywhere assumed that the approved regulations for the care of the child in regard to the maximum of sleep, fresh air, and daily bathing have been observed.

It is pertinent to add that the constant encouragement of the child, by precept and example, to eat slowly and masticate thoroughly, and the avoidance of all eating between the stated times of feeding, are pre-requisites to a successful issue in the administration of the dietary of the child.

RECIPES. (ROTCH.)

Oat-jelly:

Soak four (4) ounces of coarse oatmeal in one quart of cold water for twelve hours. Boil this mixture down to one pint and strain while hot through a fine cloth. When cool, place the jelly

on ice until needed. A portion of this jelly is to be warmed and a little salt added.

Barley and wheat jelly are made according to the same method.

Chicken broth:

A fowl weighing about five (5) pounds should be boiled twelve hours. The fluid should be strained while hot through a fine sieve and should then cool in an earthen jar about twelve hours in the ice chest. The resulting jelly can be used in full strength or diluted.

When the jelly has thoroughly cooled, the fat can be either partially or entirely removed from the top.

Muttonbroth:

A shoulder of lamb, if possible, otherwise mutton, weighing from five to seven pounds, is treated in the same way as the fowl for the chicken broth.

MENU.

Intervals of feeding,—three hours. Time of feeding,—No. 1, 6 A. M.; No. 2, 9 A. M.; No. 3, 12 M.; No. 4, 3 P. M.; No. 5, 6 P. M.

13th month: No. 1, 3 and 5—Milk, slightly warmed; No. 2 and 4,—equal parts of milk and oat jelly, slightly warmed and salted to taste.

14th month: No. 1 and 4,—Oat jelly and milk; No. 2,—milk with orange juice to be given from one-half to one hour before the milk; No. 3 and 5,—stale bread and milk, slightly warmed.

15th and 16th months: No. 1 and 5,—Bread and milk; No. 2 and 4,—oat jelly and milk (fruit always given before No. 2); No. 3,—Broth with bread or rice.

17th month: Add to No. 3, a baked potato, served with cream and a little salt.

18th to 24th month: A soft boiled egg, once or twice per week, added to the third meal.

3rd year: No. 1,—Bread, milk, and some farinaceous food with cream.

No. 2,—Fruit and bread and milk.

No. 3,—Broth with rice, potato, bread or cracker spread with cream and dessert.

No. 4,—Bread and milk.

No. 5,—Bread and milk.

4th and 5th years: No. 1,—Bread and milk, farinaceous food and cream.

No. 2,—Fruit, milk and cracker.

No. 3,—Broth, meat, potato, dessert.

No. 4,—Glass of milk.

No. 5,—Bread and milk, or milk toast.

N. B.: Oat jelly is to be varied with wheat and barley jelly.

Either mutton or chicken broth may be used.

Fruits of the variety mentioned in the paper may be used interchangeably.

DOSIMETRIC MEDICATION IN PEDIATRIC PRACTICE.*

BY

M. BORTS, M. D., CLEVELAND.

As I look back over the earlier years of my practice I readily recall the fact that it was my little patients that caused me the greatest anxiety. First, there was more difficulty in diagnosing their ailments. This feature will always be the difficult one in pediatric practice. Second, it is more difficult to prescribe for them as some medicines are unpalatable. This feature we tried to overcome by selecting menstrum to conceal the disagreeable taste. Sometimes we were disappointed in the results and we found on making our next visit that the mother or nurse had great difficulty in getting our little patient to take his medicine. When we came to investigate and taste it ourselves we found that the resulting taste of the various ingredients was quite different from what we had supposed it would be. The result was very disappointing. The child had not received the amount of medicine we thought it needed because the mother or nurse was unable to compel it to take the nauseating dose. Valuable time had been lost. The disease had been advancing. The child was apparently worse and we had failed in our efforts to relieve it. The mother is alarmed, she is discouraged, and perhaps she is disgusted with the doctor and his medicine. If she had any faith in homeopathy at all she was very likely to seriously consider the advisability of changing doctors. And I know that during the earlier years of my practice I lost the patronage of quite a number of families for no other reason than that my prescriptions were unpalatable. Palatability and the absence of any unpleasant after effects has always been the strongest points

*Read before the Ohio State Pediatric Society at Cincinnati, May 8th, 1901.

in favor of homeopathy. But this is not all, I found, as every one of you have also found, namely—that the anticipated results did not always follow even when the medicine was faithfully given. Tinctures, fluid extracts, etc., are not always of uniform strength and disappointment often follows their use because they are in a measure inert or possibly they are too strong or too concentrated and symptoms more or less poisonous have followed their use.

I have attempted in this imperfect way to point out a few of the reasons that led me to investigate and later to adopt in a large measure the use of the alkaloids prepared and administered in the dosimetric form in my practice, especially among children. But the question of palatability is not the only point in favor of alkaloidal medications in pediatrics. When I speak of alkaloidal medication I have reference especially to the dosimetric method of medication. In dosimetry we have not only the active principles of the various drugs each prepared separately, but we have these in minimum doses, in small granules and pellets, attractive in appearance, palatable and convenient to administer and, last but not least, most reliable in therapeutic results. Allow me just here to say that there seems to be a prejudice in the minds of many good, honest practitioners against dosimetry, and in my judgment it is due to an erroneous idea that those who favor alkaloidal or dosimetric medication aim to establish a distinct system of practice. This is a great mistake. It is not a new system, it is simply a new method, an up-to-date method of administering remedies the physiologic and therapeutic effects we are all familiar with. Instead of the cruder forms of the drugs we use the active principles. Instead of a full dose every four hours, we give a minimum dose at short intervals. Instead of a teaspoonful of medicine disagreeable to sight and taste, we have a little granule with little or no taste and most convenient to administer to child or adult. It should require no argument to convince an intelligent man that a granule of strychnine is easier to administer to a child than a dose of tincture of nux vomica or that a granule of digitaline is more agreeable to the little patient than a dose of tincture of digitalis. The same is true in regard to aconite, veratrum, ipecac and many of our most valuable drugs.

But perhaps you say it is not necessary to use the dosimetric granules in order to administer the active principles of drugs. That is true, but can any one suggest a more convenient and palatable method of preparing and administering the alkaloids, glucosides, etc., than in the granule form.

But this is not all. In the practice of alkaloidal therapy certain customs or basal principles have been developed, which, though not confined to this therapeutic method alone, have become in a manner habitual to its followers; whether or not these principles are well founded you may easily determine. I refer first to the giving of small doses frequently repeated until the desired result is produced. Say every 15 to 30 minutes according to the severity of the attack until the physiologic effects of the drug begin to be manifest. Such doses should then be given at longer intervals as is necessary to keep up a sustained effect. By adhering strictly to this method it is simply impossible to overdose the patient. In this way the alkaloids and other active principles and the most powerful mineral drugs may be used with perfect safety. Here we have the first illustration of the value of the alkaloids in promoting accuracy of medication. These agents are clean cut and well defined in their effects and totally devoid of the uncertainty which hangs over the cruder preparations.

If this short and imperfect paper should be the means of leading any physician to investigate the advantages of dosimetry in pediatric practice it will have accomplished the purpose of its author.

Abstracts and Extracts.

BY

WILLIAM CLARK, M. D.

I have very little confidence in the utility of the pessary, and in topical applications in gynecological practice. Their use has been very much abused. I do think that they have been a curse to the profession and womankind. I do not pretend to say that in no case will a pessary do good, nor do I pretend to say that there is no case where a topical application of iodine or carbolic acid will do good, but I do believe that the cases are exceedingly rare, and this practice of having females visiting the office of physicians week after week, and month after month, for the purpose of having the cervical canal touched with iodine, tincture of iodine, and carbolic acid, a glycerine tampon introduced, followed then with a hot water douche, is unscientific and unproductive of any good results. What is true of these applications is likewise true of other drugs used for the same purpose, e. g., nitrate of silver. I have not myself used in my practice a pessary for more than two years, and I doubt if I ever use one again.—*J. W. Andrews.*

Concerning the use of digitalis in fatty heart, the author says that it is by no means easy to ascertain absolutely that the heart in any patient has undergone fatty degeneration; but when we find that its beats are feeble and its sounds weak disproportionately to the size of the organ, we will do well to be on our guard against possibly injury from digitalis. It is evident that if digitalis causes contraction of the arterioles as well as of the heart, and the heart has undergone fatty degeneration while the muscular fibres of the arterioles have not done so, the resistance to the cardiac contractions will be increased, and a heart that is already hardly able to carry on the circulation may be still further hampered by the drug. In such cases, if it is wished to stimulate the heart by digitalis, we ought to lessen the resistance in the arterioles by the simultaneous administration of nitrites, such as nitroglycerin, nitro-erythrol, or ethyl nitrite, the latter best given in the form of spirit of nitrous ether. The same precaution should be adopted in cases where the arterial tension is high and the heart is just beginning to fail; but in such cases we have also to remember the risk that may arise from the already high tension being increased and leading to a rupture of a vessel in the brain. Here, also, it may be well to avoid digitalis altogether; but should it for any reason be thought advisable to use the drug, not only should nitrites be given at the same time, but great attention should be paid to the condition of the bowels and liver.—*Sir T. Lauder Brunton.*

* * *

The use of tuberculin injections has not been accorded the place as a diagnostic procedure that its merits seem to warrant. This is partly due to its failure as a therapeutic measure, and partly to the fact that the use of too large doses has caused a fear of spreading the disease throughout the body by the liberation of tubercle bacilli, which have been rendered innocuous by inclosure in inflammatory products. That this fear is unfounded is shown by the fact that notwithstanding its use by veterinary surgeons in innumerable cases for diagnostic purposes, no instances of aggravation of tubercular diseases have been reported.

Says Professor Koch: "The apprehension that, following the reaction, the tubercle bacilli might be unfettered and transported into healthy parts of the body has proved to be futile in the many thousand cases of injections made into cattle for the purposes mentioned. This fully agrees with my own experience in more than a thousand cases in which tuberculin was used for the

early diagnosis of tuberculosis. Here, too, in not a single case could the slightest indication pointing to an unfettering of the tubercle bacilli be observed." (*Deutsch. Med. Wochenschrift*, April, 1897.) In regard to the value of tuberculin as a diagnostic agent. Dr. F. W. White concludes that an absence of a reaction indicates almost universally an absence of tuberculosis, and the occurrence of a reaction indicates the presence of tuberculosis in more than four times out of five. The exceptions include cases of lepra, syphilis and actinomycosis. In these cases the reaction is unusually slight. In cases of syphilis it is possible that the syphilis is complicated with tuberculosis. Before making the test the temperature of the patient should be taken once in two hours for one or two days. In case of considerable febrile disturbance the indications of the test cannot be relied on. The injection should be given preferably at night. The injection should be made into the loose subcutaneous tissue between the shoulders, and should a local inflammatory reaction occur the rise of temperature may be due to this inflammation and the test must be regarded as unsuccessful. The initial dose should be 0.001 gm. of the crude tuberculin and the reaction should occur in from 18 to 24 hours. If the first injection is not followed by a reaction another dose of 0.0025 gm. should be given at the end of several days. If no reaction follows the second dose, a third of 0.005 and a fourth of 0.01 should be given. If no reaction occurs after the fourth, the patient may be regarded free from tuberculosis. The reaction is both general and local. The general reaction consists of rise of temperature from one to two degrees up to four or five, headache, sense of constriction in the chest, rapid pulse, nausea, and at times diarrhoea.

The tuberculin test is most sensitive in the early stages of the disease, and should be reserved for those cases in which doubt exists after the use of the ordinary means of diagnosis.—*J. H. Salisbury, M. D.*

* * *

Dr. Leech has done good service in calling attention to the fact that the drugs useful in bronchitis are generally given in inadequate doses. In the treatment of acute bronchitis there is no better combination of drugs than that of acetate of ammonium, spiritus ætheris nitrosi and ipecacuanha or antimony. Liquor ammonii acetatis is generally prescribed in drachm doses to be given every 4 hours, it should be given in doses of 3 drachms and increase to 6 drachm doses, if the skin does not act freely. Since

marked relief to the breathing often accompanies the sweating, sweet spirits of nitre should be given in two drachm doses and repeated at short intervals. This author considers antimony in one-twentieth of a grain dose is of most service in moist bronchitis with oppressed breathing and that in the dry form with tight cough, ipecac should be given. If the carbonate of ammonium is used it should be dissolved in water, and the dose, at least five grains, should be given in milk and repeated every hour or two.—*Jour. Med. and Science.*

* * *

There are two types of practitioners—the routinist and the rationalist—neither common in the pure form. Into the clutches of the demon routine the majority of us ultimately come. The mind, like the body, falls too readily into the rut of oft-repeated experiences. One evening in the far northwest, beneath the shadows of the Rocky Mountains, we camped beside a small lake from which diverging in all directions were deep furrows, each one as straight as an arrow, as far as the eye could reach. They were the deep ruts or tracks which countless generations of buffaloes had worn in the prairie as they followed each other to and from the water. In our minds countless, oft-repeated experiences wear similar ruts in which we find it easier to travel, and out of which many of us never dream of straying. Year by year we follow the same plan in practice, give the same drugs, and settle down into routinists of a most commonplace type.

Last year I was called to a town in Pennsylvania, and having to wait until late in the evening for the return train, I insisted, as is my wont, that the medical man should carry on his daily work and allow me to help him if possible. An afternoon round among patients chiefly of the mechanic class showed me a shrewd cheery man who, in twenty years, had gained the confidence and esteem of his patients. Kindly, hopeful words, very sensible directions about diet, and some half-dozen drugs seemed the essential in his practice. In the evening I saw him dispose of a dozen patients at an out-door dispensary rate; the examination was limited to the pulse, the tongue, and sometimes the throat. The dispensing, which was of the most primitive sort, was done at the table, on which stood four or five tin and paper boxes containing large quantities of calomel, soda, antipyrin, and Dover's powder. Other drugs, he said, were rarely necessary. He never used a stethoscope, he had no microscope or instruments of precision other than the thermometer. In reply to my questions he

said "that he rarely had to make an examination. If the patient has fever I send him to bed, if there is œdema I ask for the urine. Of course, I make many mistakes and I sometimes get caught, but not oftener than the other fellows, and when I am in serious doubt I ask for a consultation." This was a man of parts, a graduate from a good school, but early in his career he had become very busy, and gaining the confidence of the people and having much confidence in himself he had unconsciously got into a rut, out of which, at forty, only one thing could lift him—a prolonged course of additional study.

This is by no means an exaggerated picture of a routinist in general practice. We all have our therapeutic ruts and we all know consultants from whom patients find it very difficult to escape without their favorite prescription, no matter what the malady may be. Men of this stamp gain a certain measure of experience, and if of a practical turn may become experts in mechanical procedures, but to experience in the true sense of the word they never attain. In reality they suffer with the all-prevailing vice of intellectual idleness. It is so much easier to do a penny-in-the-slot sort of practice, in which each symptom is at once met by its appropriate drug than to make a careful examination and really to study the case systematically.—*Wm. Osler, M. D.*

* * *

It is an established fact that women with chronic nephritis are not taken with convulsions, at least eclampsia in such parturients is a great rarity. All this surely entitles us to say: albumin or no albumin in the urine, it does not matter whether there is or not; a woman will not be seized with eclampsia if her urine flows freely. Certainly the constant presence of albumin and casts in the urine, and the appearance of edematous swelling of the limbs, is an indication that the kidneys are damaged; such kidneys may at the critical time, cease to work much easier than healthy ones. But the simple fact that a gravida has albuminuria, does not mean that she will have eclampsia, just as little as it is certain that a woman who has no albuminuria is safe from convulsions.

It becomes therefore necessary to see that the urine be secreted freely during pregnancy; especially toward the end of the term a careful watch should be kept, every change noted, and such steps undertaken as will produce a free secretion of the kidneys. It is but natural from what has been said before, that pregnant women with albuminuria, etc., need doubly careful watching. In

cases of unsuccessful attempts at producing free urination, and in cases of tedious labor, other means must be employed besides, which tend to relieve the body of noxious agents through the skin and bowels.—*Henry J. Kreutzmann, M. D., in Occidental Med. Times.*

* * *

DON'TS IN CONNECTION WITH HEART DISEASE.

Don't feel called upon to give digitalis as soon as you hear a murmur over the heart. Study and treat the patient, not the murmur.

Don't conclude that every murmur means disease of the heart.

Don't forget that the pulse and general appearance of the patient often tell more than auscultation.

Don't neglect to note the character of the pulse when you feel it. Possibly you may look at the tongue to satisfy the patient; feel the pulse to instruct yourself.

Don't think that every systolic murmur at the apex indicates mitral regurgitation; every systolic murmur at the aortic interspace, aortic stenosis. The former may be trivial; the latter may be due to atheroma of the arch of the aorta.

Don't say that every sudden death is due to heart disease.

Don't forget that the most serious diseases of the heart may occasion no murmur. A bad muscle is worse than a leaky valve.

Don't examine the heart through heavy clothing.

Don't give positive opinions after one examination.—*Philadelphia Medical Journal.*

* * *

Dr. Christian, in a recent article in the *Therapeutic Gazette*, declares, after quite an extensive experience in the Philadelphia *Polyklinik* that he believes that fully 50 per cent. of buboes due to gonorrhea, chancroid or herpes can be aborted if proper treatment is undertaken before pus has begun to form. He thinks that the matter of aborting buboes has not received the attention it deserves in modern works on surgery. His plan is to prepare the following ointment: R Ung. Hydrargyri, Ung. Belladonnae; Ichthyol; Lanolin aa 8.00. A piece of surgical lint spread with the ointment is applied directly to the swollen gland and over this is placed a piece of oiled silk of the same size. The next essential is to insure constant pressure over the gland, and this is accomplished by placing a large pad of cotton over the oiled silk. Last a wide spica-of-the-groin is next applied, two bandages being em-

ployed. This treatment is renewed every second day, and at the end of two weeks the swelling has usually disappeared. Out of twenty cases of buboes treated by this plan, twelve were cured. Of course, if the bubo is due to tuberculous infection, this treatment will be of no use.—*Jour. Medicine and Science.*

* * *

Dr. Wm. H. Park, in a paper on the "Quantity of Diphtheria Antitoxin Required in the Treatment of Diphtheria," published in the *Archives of Pediatrics*, says: From my observation in both hospital and private practice, I have been led to adopt the following dosage:

Very mild cases,	1000 to 1500 units for the first dose.
Moderately severe cases,	2000 to 3000 units for the first dose.
Very severe cases,	4000 to 5000 units for the first dose.
Laryngeal cases, according to their severity,	2000 to 5000 units.

For children under one year I should give about one-third less than for older children and adults. I believe the condition of the throat as to swelling, extent and nature of the membrane, etc., to be a better guide to antitoxin dosage than the general condition of the patient. The duration of the disease influences the curative power of the antitoxin rather than the dosage.

If at the end of twelve hours after the injection the inflammation is advancing, or if at the end of eighteen hours the inflammation has not clearly begun to subside as shown by lessened congestion and swelling, I believe a second dose of antitoxin should be injected. In a very few cases a third dose is required at the end of twenty-four to thirty-six hours. For the broncho-pneumonia and sepsis complicating some of the worst cases antitoxin is generally of no avail. Although I cannot agree with Dr. McCollom in regard to the necessity of from 40,000 to 60,000 units in the very bad cases, nevertheless, his results certainly encourage us to give all the antitoxin that we think indicated. It is better to give too much rather than too little. I think I am correct in saying that it is the opinion of the visiting physicians at the hospital that moderate doses accomplish as good results as very large ones.

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Editorial.

PAY OF THE ARMY MEDICAL CORPS.

It may be of interest to compare the pay of the officers of the medical corps of the army to the usual incomes gained in private practice.

A young man entering the medical corps must be between twenty-one and twenty-nine years of age. His grade is that of first lieutenant, and he receives the pay and emoluments of a mounted officer, i. e., care and forage for his horse, and a small increase in pay over corresponding grades in the unmounted service. After five years service he receives his captaincy, and then

must advance by linear promotion, in virtue of vacancies occurring above him.

For the first twenty years' service the pay of the grade is increased 10 per cent. every five years; thus an officer of twenty years' service receives 40 per cent increase over the pay of the grade.

The salary attached to the different grades, with service increase is as follows:

	Yearly	Monthly	Aft. 5 Yrs.	10 Years	15 Years	20 Years
1st Lieut	\$1,600	\$133.33				
Captain	2,000	166 67	\$183.33	\$200.00	\$216.67	\$233.33
Major	2,500	208.33	229.17	250.00	270.83	291.67
Lieut. Colonel.....	3,000	250.00	275.00	300.00	325.00	333.33
Colonel	3,500	291.67	320.83	350.00	375.00	375.00
Brig. General	5,500	458.33				

The pay roll of a colonel is limited by law to \$4,500.

In addition to his salary an officer is given his quarters, while stationed at a military post, or its equivalent when his duties call him elsewhere; and is retired from active service at sixty-four years of age on 75 per cent. of the pay and increase of the grade. Upon retirement he does not receive an allowance for quarters.

The above figures, we believe, will compare favorably with the income of the average *successful physician* in private practice, and is incomparably superior to the *general* average.

A medical officer of the army is under no expense to maintain his practice, and in this respect enjoys a great advantage over the civilian. On the other hand the opportunities and incentives for him to attain eminence in the profession are infinitely less than they are in civil life. He spends the greater part of his young manhood on the frontier posts or in the provinces, remote from medical centers, and secure in the feeling that his living is provided. Thus he finds himself without two of the principal factors of success—the necessity of competition, and the access to progressive medical centers.

G. SEELEY SMITH.

GROUND FOR OBJECTION.

We are in receipt of a letter from a Boston physician who takes the opportunity to register an objection to the quoting of foreign authorities only on a subject in which he claims the

Americans excel. The cause for this objection was an article which appeared in the GAZETTE during the winter months. In concluding his letter the writer states as follows :

"Allow me to say that it strikes an American physician as peculiar to find another American physician quoting only foreign authorities in the discussion of a disease which was first investigated by an American physician and the treatment of which was instituted by an American surgeon. It was some years after the operation was a common one in America before foreign physicians and surgeons would acknowledge that the disease existed. One becomes quite accustomed to reading French or German articles in which an entire ignorance of American work is shown, but it seems to me that it is a pity that an American physician, writing at this time, must seek foreign authority for illustrating any points in the diagnosis or treatment of appendicitis."

It is possible that this will come under the notice of the offending member of the profession; but to avoid all risk would it not be well to address an objection to him direct?

Periscope.

Cellulose Digestion in the Alimentary Canal. By Erich Mueller (Pflüger's Archiv., 1901, p. 619). Several previous workers (Knauth, Biedermann and Moritz, 1898,) have stated that a cellulose-dissolving enzyme occurs in the secretion of the hepatopancreas of certain invertebrates. In the present experiments paper was employed, but a loss of paper and a formation of sugar was never found, and the search for a cellulose-dissolving enzyme was entirely negative. Indeed, in control experiments, in which the secretion and alkaline solution were alone used without the paper, more sugar was often found than in the experiments where paper was added.

The Cause of the Increase of Protein Decomposition during Inanition. By Martin Kaufmann (Zeit. Biol., 1901, p. 75). The increase in nitrogenous katabolism often observed during inanition can be prevented in rabbits by giving sugar, and when it does occur it is due to the poorness of the body in protein-sparing fat.

Does Muscle Contain Mucin? By G. A. Fried and William J. Gies (Proc. Amer. Physiol. Soc., 1900, x.) After allowing for alkali albumin, which is precipitable by acid and soluble in excess, only a faint turbidity suggested traces of mucin.

Proteids of Unstriped Muscle. By Swale Vincent and Thomas Lewis (Proc. Physiol. Soc., 1901, xix). Rigor mortis, accompanied by slight acidity, occurs in the plain muscle of the stomach and rectum. Extracts are neutral or alkaline; they contain little or no paramyosinogen, but abundance of myosinogen.

Silicic Acid in Human and Animal Tissues. By Hugo Schulz (Pflueger's Archiv., 1901, p. 67). A number of analyses are given which show that silicic acid is found in all forms of connective tissue. Its diminution in diseased conditions has some therapeutic interest.

Nature of the Sugar Present in Blood, Urine and Muscle. By Frederick W. Pavy and R. L. Sian (J. Physiol., 1901, p. 282). The reducing action of the sugar obtained from blood, urine, and muscle is invariably increased after the action on it of sulphuric acid. It cannot therefore be simply glucose. This conclusion is confirmed by an examination of the osazones obtainable; mixed with glucosazone, is a variable amount of another osazone which melts at 153-155 degrees. The sugar from which this is derived appears to be isomaltose.

Quantity of Sugar formed in the Animal Organism after Feeding with Various Proteids. By Ernst Bendix (Chem. Centr., 1901, I p., 468). In order to determine how much sugar is formed when certain proteids are used as food, dogs were rendered free from glycogen by depriving them of exercise and excluding all carbohydrates and most proteids from their diet. They were then fed with various proteids, and at the end of half an hour were injected with phloridzin and again when 4 or 5 hours had expired; by this means, the sugar formed in the organism passes at once into the urine. The ratio of the quantity of sugar in the urine to the nitrogen present gives a measure of the amount of sugar formed by the decomposition of the proteid. Casein was found to yield more sugar than ovalbumin, although the former does not form sugar when decomposed by acids, whilst the latter yields it abundantly, and similarly, after feeding with gelatine, the urine contained less sugar than when casein was used. The leucine formed by the decomposition of the albumin in the body is converted into sugar.

SPENZER.

New Books.

A HAND-BOOK OF MATERIA MEDICA, PHARMACY AND THERAPEUTICS, Including the Physiological Action of Drugs, the Special Therapeutics of Disease, Official and Practical Pharmacy and Minute Directions for Prescription Writing. By Sam'l. O. L. Potter, A. M., M. D., M. R. C. P. Lond. Formerly Professor of the Principles and Practice of Medicine in the Cooper Medical College of San Francisco; Author of the "Quiz-Compendis of Anatomy and Materia Medica," "An Index of Comparative Therapeutics," Several Articles in Foster's "Practical Therapeutics" and "Speech and its Defects." Late Major and Brigade-Surgeon of Volunteers, U. S. Army. Eighth Edition, Revised and Enlarged. Price \$5.00. P. Blakiston's Son & Co., 1012 Walnut St., Philadelphia. 1901.

One of the most popular, extensive and trustworthy works of its character in any language. It merits the high esteem and confidence, both of the student and busy practitioner, which it has held from the earlier editions. The present volume shows careful and extended labor, devoted to the rewriting of chapters on some of the more important drugs; in doing which the author seems to have consulted many of the original articles pertaining thereto.

All in all, we know of no work, which we would as willingly recommend to the physician desiring to acquaint himself with the theory and practice of the application of medicaments. Clearly expounded, but not too extensive, with no injury to its lucidity, principally because of the writer's happy style of presentation.

SPENZER.

A MANUAL OF OPERATIVE SURGERY. By Lewis A. Stimson, B. A., M. D. Surgeon to the New York and Hudson Street Hospitals; Professor of Surgery in Cornell University; Corresponding Member of the Societ  de Chirurgie, Paris, and John Rogers, Jr., B. A., M. D. Surgeon of Gouverneur Hospital, New York; Instructor of Surgery in Cornell University. Fourth and Revised Edition with 293 illustrations; published by Lea Bros. & Co., Philadelphia.

A preliminary chapter dealing with the accessories of an operation is followed by one on ligature of various arteries. The third chapter considers amputations and the advantages and disadvantages of various methods. The fourth chapter describes excision and resection of various bones and trephining. Miscellaneous and plastic surgery is fully dealt with. Surgery of the eye, ear, nose and throat is treated according to various methods. All abdominal operations are separately treated, resection of intestine, gastro-enterostomy, operations on the liver, gall bladder,

spleen and kidney. The two closing chapters are devoted to genito-urinary surgery of the male and female. Throughout the work the author has given conclusions drawn from a wide personal experience, the result being a compact reference book for daily use well illustrated and the various methods clearly described.

CLINICAL PATHOLOGY OF THE BLOOD. A treatise on the general principles and special applications of Hematology. By James Ewing, A. M., M. D.; Professor of Pathology in Cornell University Medical College, New York City. Illustrated with 30 engravings and 14 colored plates drawn by the author. Lea Bros. & Co., Philadelphia and New York. 1901. Cloth \$3.50.

This book brings to the English reader much that has heretofore only been accessible in some foreign language. The chapter on technics and chemistry of the blood is especially fine and of practical importance. The engravings are good and the colored plates leave little to be desired in that line. The various anaemias and leucaemias and histogenesis of the blood corpuscles are very fully considered and the malarial plasmodium in its various types and stages of development is nicely illustrated. In the whole book the laboratory idea has been kept subservient to the clinical usefulness. The bibliography is very complete, the references being placed at the end of each chapter, making them very convenient for the reader. Upon the whole the author has done well all he attempted.

D. S. HANSON.

Society Proceedings.

May L. Bassett, Medical Reporter.

CUYAHOGA COUNTY MEDICAL SOCIETY.

Regular Meeting, June 6, 1901.

The regular meeting of the Cuyahoga County Medical Society was held in the Medical Library Building, Thursday evening, June 6th. The meeting opened with the Vice President, Dr. Leroy S. Chadwick, in the chair, and in the absence of the Secretary, Dr. Moorehouse was elected Secretary pro tem. After reading the minutes of the last meeting the following physicians were elected to active membership: Drs. B. G. Hannan, Frederick C. Taylor and William Henry.

On motion the regular order of business of the Society was suspended in favor of cases waiting. Dr. W. H. Merriam presented the following:

I have brought some cases this evening illustrative of the effects of improper feeding, some of which came to the Charity Hospital Clinic. Of course, the data are incomplete to a greater or less extent, for, as you know, it is apt to be. These cases are never regular in attendance at the clinic, especially if they improve at all.

The child we have here, S. S., aged 15 months, came on the 20th of February. When it came to us it had been having everything to eat—breast milk, soups, coffee, tea, etc.—had complete loss of appetite and vomited constantly. The bowels moved once or twice a day. Examination reveals square forehead, large, open fontanelles; twelve teeth at present. There is no enlargement of the long bones other than slight enlargement of the ribs at the cartilages. The spine seems quite full in the lumbar region and there is moderate scoliosis and kyphosis, especially in a sitting posture. The diagnosis was rachitis. Examination of heart, negative; lungs, negative; abdomen, negative. We advised the mother to use nothing but cow's milk, diluted with oatmeal gruel, and to abstain from the use of breast-milk. Calomel, gr. 1-10, every hour until the bowels moved freely. Three days later the mother reported that the child cried constantly, but had not vomited since the first day, and on the second day of the month of March she reported the condition much improved, good appetite, with the bowels regular.

This child, H. S., aged 10 months, came to the clinic on the 8th of May. The child was well and healthy till about two months ago, when the mother's milk began to fail and she gave her milk and water from a bottle. Since then she cries nearly all the time and sleeps but little. The bowels move once daily, but the fecal matter is hard and white. Examination reveals parietal eminences marked; beaded rosary very distinct. No epiphyseal enlargement otherwise. Abdomen prominent but not markedly so, mention made of sweating about the head; no teeth as yet. Diagnosis, rachitis and malnutrition. We prescribed phosphorus, gr. 1-10, and three ounces of Ol. Morrhuol $\frac{1}{2}$ drachm t. i. d. The child was given a diet of cow's milk three parts and water one part, with two drachms of cream to be given with each 6 or 7 ozs. Ten days later the child is very markedly improved, is apparently quite healthy, eyes bright and looks quite well, whereas when it came to

the clinic it showed all the evidences of lack of nutrition. I think it can all be attributed to change of diet.

This third case, M. S., aged 6, is of peculiar interest for the reason that they have sent a child we had not seen before, which proved to have a like difficulty. The mother is 32, father 32, health of both parents good; three brothers and one sister, oldest 10 years, youngest 1 year. This is a thin, poorly-nourished child. Was well-nourished as a baby, had measles two years ago, whooping cough at 1 year old. It has a good appetite, bowels regular, sleeps well but coughs a good deal at night. Examination shows some enlarged post-cervical glands, and enlarged submaxillary. No evidence of epiphyseal enlargement. Examination of heart, negative; lungs, negative; abdomen, negative, except rather prominent; head square.

Now when we sent to this family for the child, which had been seen before, the mother brought this one, which is two years younger. This child has marked epiphyseal enlargement and marked knock-knee. Both of these children came from a family in which the mother said the health of the remaining children was good. You can see here the epiphyseal enlargement of both ulna and radius, and the condition at the knee joint.*

The regular program of the evening was called.

"Laboratory Feeding with Especial Reference to the Modified Milk Fund."—Dr. J. J. Thomas. This paper appears in this issue of the GAZETTE.

Discussion, Dr. Jones: I would like to ask Dr. Thomas what facilities the Laboratory offers to my part of the city for getting milk from it. Suppose I wished to prescribe modified milk for a patient, how could I get it?

Dr. Crumrine: I have heard the objection made to laboratory milk, that in the process of modifying the milk the natural emulsion of the fat was broken up; that is, the natural emulsion destroyed. I should like to ask if this is a serious objection to modified milk?

Dr. Quirk: It has occurred to me from the few cases coming under my notice that one objection to modified milk is the fact that prescriptions are not changed often enough so that the child gets sufficient change from day to day. I believe the mother's milk changes from day to day and that it is essential to the welfare of the child that it should be so, and the modified milk diet seems

*Since presenting these cases, the father has come to the clinic giving a history of moderate drinking as long back as he can remember, and now has cirrhosis of liver, as yet of a moderate grade.

to me too much like boarding-house fare—the child is kept on one prescription too long.

Dr. Thomas: In reply to Dr. Jones' question, I will say that the facilities for getting laboratory milk are very good all over the city. All that is necessary if one wishes to prescribe laboratory milk for a patient is to telephone the prescription to the laboratory, giving the different percentages and the amounts wanted, and they will deliver the milk. The physician writes the prescription with exactly the same care that he writes a prescription containing drugs. As for getting milk in Newburg, where Dr. Jones lives, I think that can be arranged. The facilities for getting milk in the extreme city limits have been somewhat limited lately owing to a scarcity of wagons, but I think if the laboratory company were informed they would arrange to deliver at some point from which the parents could get the milk. They would probably be ready to deliver it some distance away if they understood the need, and a physician made the request.

In regard to emulsion of the fats being changed by the processes of modifying the milk, or the separation of the cream from the milk, I will say that these questions have been answered by White, Botch and others fully in various articles which have been published. All came to the same conclusion, that so far as the microscope demonstrates the question, there is no change in the emulsion through modifying. As regards the collection of fat upon the bottles at the surface, that is due to a combination of circumstances. If the bottles are sent out in ice this collection of fats is avoided, or it may be avoided by the heating and cooling of the bottles before they are sent. The length of time necessary for the delivery from the time of modifying to arrival at the point of destination, gives time for the change of temperature which causes the collection of fats. But this does not alter the value of the milk. No change occurs where there is no change of temperature.

In regard to Dr. Quirk's objection, that is, of course, an objection that is always raised, but I don't see that it is any more of an objection to laboratory feeding than to any other kind of feeding. Of course the only perfectly satisfactory way of feeding is by mother's milk. The mother's milk changes from day to day and changes occur even in different parts of the day, and even during the brief period of feeding, and our ingenuity has not found any system of feeding that is as perfect as mother's milk, but I do not see that that is any argument as to the laboratory

feeding being a "boarding-house" method. The physician can change the prescription every day if he chooses. The only thing necessary is that he be the one to give or change the prescription. If the parent should telephone the laboratory to send milk for an infant they will refuse to do so, immediately referring him to his physician for a prescription. The laboratory absolutely refuses to make out prescriptions or send milk except upon a prescription by a physician.

"Child Feeding After the First Year," Dr. Mirriam G. Keruish. This paper appears in this issue of the GAZETTE.

Dr. Cushing: Speaking of child feeding—in regard to giving up the nursing bottle and getting the child to take milk from a glass—I would say that personally I am partial to the nursing bottle. Children are likely to prefer the new kinds of food given, to milk, and when the child does not drink readily from a glass, it is a very common thing for the child to take much smaller quantities of milk than are advisable. So I like to have the child go on with the use of the nursing bottle after it has begun to take new foods, as in this way it is more likely to get the proper amount of milk. There is also likely to be much more care used in the cleansing of the vessels in which milk is kept and in all the details of milk-feeding.

CURTAILED REPORT OF THE PROCEEDINGS OF THE ST. PAUL MEETING OF THE AMERICAN PRO- TOLOGIC SOCIETY.

(CONTINUED FROM JULY ISSUE.)

"Disease of the Sigmoid," by Dr. Geo. B. Evans, Dayton, Ohio, was then read by the author.

The essayist discussed the question as to whether or not the rectum was the receptacle for faeces, or whether the latter is arrested, detained, and accumulated in the sigmoid flexure of the colon. The reader inclined to believe that the rectum was the receptacle.

From its situation and anatomical relations, the reader was convinced that the sigmoid is oftener the seat of obscure abdominal diseases than has generally been suspected. In appendicitis there is often reflected pain over the whole abdomen, often in the left iliac region over the sigmoid. Now if this is true, the converse is also true. This point was illustrated by reference to a

patient who had a distinct history of appendicitis. The condition was promptly relieved by flushing the sigmoid and colon with large quantities of hot boracic solution. This treatment was advised in all cases of supposed appendicitis. It can do no harm and might do good.

Patients should be examined: (1) By palpation and percussion, both in recumbent with thighs well flexed, and in the erect posture; (2) Digital; (3) By a combination of the two; (4) By ocular examination, using the tubular speculum; (5) If the speculum should fail to enter the sigmoid then use the Wales bougie.

The reader was confident that many of the so-called catarrhal conditions of the bowels are congestion, if not inflammation, of the sigmoid, attended with large discharge of mucus, accompanied with pain over the abdomen. In these cases the sigmoid and colon are washed with hot boracic solution, using as much as one or two gallons. If the results are not satisfactory 3 ounces of a 50 per cent. solution of fluid hydrastis are added and applied through a Wales bougie.

After the inflammatory changes have taken place the task is more difficult. If we find the stools mixed with pus and mucus there is ulceration, and if the rectum is healthy the trouble will be found in the sigmoid.

A case was reported illustrating this point which yielded readily to the flushing method.

Moderate exercise and a liberal and nutritious diet of milk, soft boiled or poached eggs, and plenty of fresh air and sun baths are valuable adjuncts.

Syphilitic ulcerations should be treated constitutionally and locally as described. The inunction method alternately with the iodides in conjunction with the passage of the bougie is indicated. If the case be an operative one it is a question whether there should be a total resection with end to end anastomosis or a resection and then an anastomosis by passing the distal end of the sigmoid through a slit in the rectum, holding the sigmoid *in situ* by means of traction sutures passed through the muscular walls of the sigmoid, leaving the sutures long enough to emerge from the anus clamped by long artery forceps across it. If neither of these methods be practical, resort must be had to colostomy. The latter is palliative; the former radical, and the question is who will advise it; when and under what conditions would it be justifiable?

The reader was also fully convinced that grippe was an important factor in sigmoiditis.

A paper entitled "Recto-Colitis" was then read by Dr. William M. Beach, Pittsburg, Pa.

The essayist described Recto-Colitis as a condition of the rectum and colon that generates functional derangements consequent upon varying degrees of inflammation of its mucous membrane.

A clear exposition of the anatomic elements of the gut and its auxiliary structures was given.

Omitting malignant diseases, Recto-Colitis was considered under the following stages: Congestion, atrophic, catarrh, hypertrophic catarrh, and ulceration.

Simple congestion due to engorged blood vessels may be ephemeral and express itself locally in the form of dysentery and tenesmus and the excretion of an enormous quantity of mucus. This condition if allowed to continue becomes chronic, developing usually the hyperthropic catarrh; epithelium is shed, valves swollen and thickened, narrowing of rectal straits, diarrhoea alternating with constipation.

Atrophic catarrh is usually accompanied by the constipated habit; dry hard stools, and minute anal fissures. Secretions are insufficient on account of gland impairment. Atrophic Recto-Colitis is rare.

The ulcer is the culmination of the inflammatory process, and in the experience of the reader rarely occurs above the sigmoid flexure.

The symptoms of Recto-Colitis are : (1) Local or physical; (2) Constitutional or rational, and the reader described them fully.

From the standpoint of the proctologist the question was asked "Is chronic Recto-Colitis curable?" To answer this question it became necessary to study clinical experience. The reader called attention to cures reported by Matthews, Martin, and other proctologists and referred particularly to one type, congenital or functional narrowing of the recto-sigmoid strait. In many of these cases the spasm is so strong when the instrument touches the inflamed surface, that the strait is entirely closed; in others there is a prolapse of the sigmoid. A case was reported which had been referred to the reader by a neurologist. Examination revealed piles, and protoscopy a very sensitive rectum covered with

glairy mucus; the sigmoid strait narrow and spasmodic with great pain at the upper part of the sacrum. The treatment consisted of a nightly administration of a saline; a daily injection of hot water, then, through the protoscope, a mopping of the entire surface with sweet oil, and then through a narrow tube attached to a Davidson syringe a half pint is thrown into the colon, while the patient is in the Martin position. After peristalsis and tenderness subside, mildly astringent solutions are sprayed and rectal massages given. The reader had had most excellent results with the protargal spray.

Recto-Colitis due to mechanical obstruction or irritation can only be relieved by removal of cause; to clear the field so that the remedies applied locally might be efficacious.

Abrasions, pin-point denudations of epithelium should be touched with pure carbolic acid or solution of silver nitrate. If the mucosa presents a deeply injected appearance, bland remedies were thought to be more efficacious, such as albolene. Valvular hypertrophies were reduced by the use of a two-bladed divulsor, wrapped with cotton.

Internal medication was necessary to correct intestinal secretions and to allay neurosal symptoms.

Recto-Colitis due to polypus hemorrhoids, fistula, or stiff valves is to be cured by the removal of these conditions. In conclusion the essayist said:

Our discussion of the treatment of Recto-Colitis consists in:

1. That it is a condition of the rectum and colon of varying degrees of inflammation.
2. A knowledge of the anatomical bearings of the rectum and colon is necessary to understand the symptoms and reflexes.
3. The symptoms are local and systemic.
4. Recto-Colitis may be catarrhal or ulcerative.
5. It may be acute or chronic.
6. When dependent upon polypus, hemorrhoids, fistula, etc., the cure depends upon their removal.

7. Chronic Recto-Colitis due to altered secretions, anæmia and congenital narrowing of the sigmoid strait, is difficult to cure.

A paper entitled "Anal Pockets" was read by Dr. Louis J. Krouse, Cincinnati. The doctor first entered into a very exhaustive study of the so-called anal pockets in which he gave the results of his own observations and those of other investigators. He discovered by his researches that these pockets were present in the

rectums of the living to the extent of 80 per cent, but that they were entirely absent in the dead. In conclusion he said:

That the so-called anal-pockets may be the cause of certain diseases located in the lower outlet of the bowel, I cannot gainsay; but I believe that they are most likely the frequent predisposing cause of an irritable ulcer of the anus.

If we examine the rectum in the quiescent state, when the bowels are empty, we find that the anus is closed; the anal valve and its corresponding sac are absent. But when the bowels move, the anal canal is opened and the anal valve becomes prominent, the same as would occur had an anal speculum been introduced and opened. Should a hardened faecal mass pass through the anal outlet, with a prominent pseudo-valve protruding, then this valve would most likely be caught by the moving mass and possibly be torn, producing what might be termed an irritable ulcer of the anus.

A paper entitled "Treatment of Rectal Prolapse" was read by J. Rawson Pennington, M. D., Chicago.

In considering the treatment of rectal prolapse it is essential first to recognize the pathologic condition. The object of treatment is: (1) Reposition of the prolapse; (2) its fixation in the normal position; (3) prevention of recurrence.

He believes that some of the most important factors in the production of rectal prolapse are to be found within the intestinal canal and considers the *plica transversalis recti et sigmoidae* as one of the most, if not the most, important causative factor. He continued by saying that various procedures have been devised for the treatment of this malady, but to be successful, the operation selected, must be determined by the variety and specific conditions of the prolapse, otherwise it will be a failure.

Of these procedures he mentioned (1) those having for their object the production of adhesive inflammation between the coats of the intestinal walls; (2) narrowing the anal canal; (3) amputation; (4) reposition and bony fixation; (5) reposition and intra-abdominal fixation (colopecty or sigmoidopexy); (6) Thur Brantz massage; (7) electricity; (8) ligature.

He recommended: (1) For prolapse of the mucous membrane only; reclining posture, adhesive straps, cauterization or amputation; (2) For reponible, non-ulcerated prolapse of all the coats of the rectum and colon invagination remove the cause, if possible, and try massage and electricity. Should these fail, then resort to colopecty. (3) For incarcerated irreponible ulcerated

prolapse, circular resection, according to the technique of Mikulicz and Nicoladoni. The operation of colopexotomy, procto-coccypany, procto-sacro coccypany, procto-sacropany, Gersuny's twist and the circular suture of Thiersch are rarely indicated.

"A new Method for the Removal of Hemorrhoids Under Local Anesthesia" was explained by Dr. Thomas Charles Martin, Cleveland, Ohio. He stated that non-malignant anal growths could be removed painlessly without resort to general anesthesia by means of a technique which he would describe, provided it be performed by the trained hands of an operator who thoroughly understands the principles of infiltration anesthesia, and who, furthermore, has been sufficiently persevering to master the difficulties encountered in the application of those principles to this operation.

Dr. Martin presented an instrument consisting of a hollow cone $3\frac{1}{4}$ inches in length, $\frac{3}{4}$ of an inch in diameter at its distal extremity, and $1\frac{3}{4}$ inches in diameter at its proximal end. One quadrant of the cone is fenestrated. This is occupied by a movable blade with a serrated edge which makes contact with the cone's serrated edge. The movable blade is sheathed in the cone when the jaws of the clamp are separated. When it is introduced it may be made to receive the pile without irregularly expanding the anus. The great essential to painless manipulation of the sphincter is the even distribution of pressure throughout its circumference.

The patient should be placed in the Sim's posture and the light focused on the field of operation.

The different tumors being located, the summit of each should be infiltrated with a 1-10 of 1 per cent. solution of eucaïne. A very fine needle should be employed. Care should be taken or else, instead of effecting an infiltration of the structure, the anesthetic may be driven at once into a blood space and directly into the circulation.

Each pile to be operated upon is seized by a curved hemostat which should be surrendered to an assistant who should radiate it from the anus and well out of the way of the operator.

The well lubricated clamp should now be introduced into the anus with its blade pressing against the tumor which is first to be removed. When the instrument is buried to its shoulder the fenestrum should be opened into which the hemorrhoid is pulled. The pressure incident to the introduction of the clamp is often sufficient to express the eucaïne from the tumor, so that re-anes-

thesation becomes necessary in order to perform the manipulation necessary to carry the tumor completely within the clamp. The clamp should now be closed and locked and the growth cut away by means of scissors.

If secondary hemorrhage is feared, the wound should be locked-stitched with cat gut. If it be of the connective tissue or fibrous variety, the pedicle should be cauterized. The wound should be treated as in any other surgical procedure. The use of this clamp gives the operator a clean field and a clear view. The pile is "dry docked."

This clamp demands that the wound shall be linear in form and parallel with the axis of the anus.

This method of clamp operation is inapplicable to inflamed or thrombotic piles.

Local anesthesia is a surgical refinement; skill in effecting it may be acquired only by the exercise of patience and practice.

Dr. Geo. J. Cook, Indianapolis, discussed in a general way the employment of caustic agents in the treatment of hemorrhoids. His discussion was very thorough. The conclusion that he drew was that such agents for the most part should not be used and that he recommended operative procedures whenever possible.

A paper entitled "Foreign Bodies in the Rectum, with a Report of a Case" by Lewis H. Adler, Jr., Philadelphia, Pa., was read by title, but the case was deemed of sufficient interest to bring before the Society, even in the absence of the author.

A man 60 years of age was admitted to the wards of the Polytechnic Hospital, Philadelphia, Dec. 1, 1900, with a history that he had been wearing for a long time an instrument which he called a pile-supporter, and that it had suddenly slipped within the bowel and could not be removed.

Several attempts were made to remove the foreign body before succeeding. It was the handle and valve of a steam radiator pipe. The patient left the hospital the third day. Upon admission to the hospital the man's son informed the resident that his father was addicted to masturbation, and that he employed the wooden knob to further that habit. Subsequently the physician who had referred him to the hospital presented me with a large bent piece of iron rod about fourteen inches long and one-fourth of an inch in diameter which the patient had used for the insertion and withdrawal of the knob. The hooked iron rod and knob were exhibited to the Society by Secretary Beach.

Correspondence.

Office of the Secretary,
Carlisle, Pennsylvania, July 15, 1901.

My Dear Sirs:—Permit me to invite your attention to the enclosed announcement of our Enno Sander prize essay contest for the present year. We regard this as the most important medico-military event that has ever occurred in this country, and, in order that no possible contestant may be unaware of the competition, we desire it to have the greatest possible publicity. Will you not then favor the association by bringing it before your readers, editorially and otherwise, in as forcible a manner as practicable?

Trusting to receive favorable action, and requesting a copy of the number containing your remarks on the subject, I remain,
dear sir,

Very sincerely yours,
JAMES EVELYN PILCHER, Secretary.

To the Readers of the Gazette :

Allow me to call your attention to the fact that I wish to take a limited number of patients to nurse and board at my home. I think that my experience and the references which I can furnish from prominent physicians in Cleveland and other cities warrant me in saying that you cannot find a more desirable, quiet place for a patient.

I am a graduate of the University of Michigan Training School for Nurses, of the class of 1893. In connection with and previous to my work at Ann Arbor, I served three months in the Woman's Hospital, also one year in the Episcopal Hospital in Philadelphia. Since then I have had an experience of seven years of both private and hospital work.

The preparations made to receive a limited number of patients warrant home comforts in addition to hospital necessities and accommodations. The dietary will also receive special attention. Charges will range from ten to thirty-five dollars a week.

I trust that you may be sufficiently interested in the above to write me for further particulars and for references, which I shall be glad to furnish. See advertisement elsewhere in this journal or address

GRADUATE NURSE,
Care of CLEVELAND MEDICAL GAZETTE,
720 Rose Building.

Notes and Comments.

Dr. Guy H. Fitzgerald has opened an office at 1131 Detroit street.

On the 30th of June, to Dr. and Mrs. Charles F. Hoover, a daughter.

Dr. Calvin Shaw has returned from a two weeks' vacation in Toronto.

Dr. John Perrier, after a prolonged illness, is able to attend to his practice again.

Dr. George Seeley Smith was confined to his home on Cornell Street for a week through illness.

Dr. S. H. Large has been appointed Assistant in Laryngology at Western Reserve.

Dr. Hubert L. Spence spent several days recently in Buffalo visiting the Pan-American.

Dr. Martin Friedrich has been appointed city Health Officer in the place of Dr. Daniel Heimlich.

Dr. Hal. F. Bishop was married on 24th July to Miss Katharine Frances Callow, of 25 Hilburn Avenue.

Dr. R. W. Williams, of 331 Jennings avenue, was in Detroit for several days during the latter part of July.

Dr. G. W. Stevenson has moved his office and residence from 1437 Woodland avenue to 180 Oakdale street.

Dr. John N. Lenker will return to the city on the 6th after a vacation of two weeks in Eastern Pennsylvania.

Dr. Walter Lincoln has returned to the city and resumed practice after a prolonged absence in Philadelphia.

Dr. W. Lewis Yeomans, of Bucyrus, was married on the 18th of June to Miss Selina Barrett Morison, of Chicago.

Dr. Frank Oakley has returned from Toronto, where he had been hurriedly called because of the illness of his father.

Dr. W. T. Barger has moved his office from 486 Wade Park avenue to The Belgrave, corner of Wade Park and Marcy avenues.

Dr. Robert G. Schnee has bought a new residence at 1959 Superior street, corner of Superior and Norwood. He will move into it on August 1st.

Dr. A. H. Marvin and family have gone to the Adirondacks to spend a few weeks.

Dr. A. P. Ohlmacher and family, of Gallipolis, were guests with Dr. and Mrs. Robert G. Schnee for a few days during the latter part of July.

Dr. C. W. Wooldridge has moved his office from 933½ Woodland avenue and now has his office and residence in The Belgrave on Wade Park avenue.

Dr. Hunter Robb and family are enjoying a two months' outing at Murray Bay, Quebec, on the St. Lawrence. The doctor will return the 15th of September.

Dr. John M. Ingersoll has been appointed Consulting Laryngologist to the Cleveland City Hospital, being the representative from Western Reserve Medical School.

Dr. Charles F. Dutton, who has been Professor of the Theory and Practice of Medicine in the Cleveland College of Physicians and Surgeons for seventeen years, recently resigned. He was subsequently banqueted by the Faculty.

The Union Medical Association of Northeastern Ohio will meet in Cleveland 13th August.

The American Association of Official Surgeons will hold its next annual meeting in Chicago, September 18th and 19th, 1901.

Infant feeding is an especially important and difficult problem during the heated term. The directions formulated by one of the leading American specialists, which were first published by The Maltine Company last summer, proved of immense service to many progressive practitioners. A new edition, comprising clear instruction and a liberal number of detachable recipes, tastefully bound, can be had gratis by applying to The Maltine Company, Eighth avenue and Eighteenth street, Brooklyn, N. Y.

Smallpox and the Glasgow Exhibition.—In view of the exhibition, says *The Hospital*, so shortly to be opened in Glasgow, strenuous efforts are being made to arrest the smallpox epidemic, more especially by vaccination. A large number of students are being employed to go from house to house in the poorer districts to vaccinate the inhabitants. Primary vaccination can be effected only by registered medical men, and a large number of these are also being invited to join the crusade.

According to cable dispatches, the Sultan of Turkey intends to present to the Berlin Hospital a wing, the plans of which have been sent to Emperor William for approval.

An epileptic in Jersey City, was seized with a convulsion and fell face downward in a puddle of water only two inches deep, and when found was dead from suffocation.

"Healers" Certificate.—The International Machinists' Association decided recently that a certificate of death from a Christian Scientist doctor would not be recognized in the future in a claim for death benefits.

The Medical Department of the University of Buffalo is in receipt of a gift of \$50,000 for the purpose of erecting a laboratory to be devoted entirely to research work. It will be known as the Gratwick Research Laboratory.

Mr. John D. Rockefeller Thanked.—The American Medical Association at its recent meeting adopted resolutions expressing thanks to John D. Rockefeller for his gift of \$200,000 for the furtherance of scientific research along medical and surgical lines.

The Louisiana Leper's Home.—The Gustine plantation has been bought for a lepers' home, but may not be used for that purpose. Strong opposition against the establishment of the home in that locality has been aroused among the people of the surrounding parishes of Jefferson and St. Charles, and a mass meeting in protest was recently held. The school boards and boards of health of Jefferson and St. Charles parishes and the town council and board of health of the city of Kenner have also joined in the petition against the location of the lepers' home.

According to the *British Medical Journal* of February 9, the number of deaths from plague in the city of Bombay, from January 9 to 15, was 40, 45, 63, 45, 35, and 51 respectively for each of those days, or 324, as compared with 222 during the preceding week. In the corresponding week of last year, the deaths from this disease numbered 428. The plague is found in nearly every district of the city. In Calcutta fifty to sixty cases occur weekly. The government of Madras has granted 150,000 rupees toward the expense of preventing plague. During the week ending January 15, in Mysore Province, the cases of plague numbered 419, a marked increase over preceding records. The mortality in Bombay city is now sufficient to justify the present being called the fifth epidemic of the disease since 1896.

The effects of antityphoid inoculations in the 15th Hussars, a British regiment in India, have been encouraging. The incidence of typhoid fever in the inoculated was represented by 0.55 per cent., and the mortality by 0.25 per cent.; while the incidence in the uninoculated was 6.14 per cent., and the death rate 3.35 per cent.

Death of an Eminent Foreign Professor.—Joseph Fodor, M. D., professor of hygiene at the University of Budapest, has recently died. He was born in 1843, studied under Pettenkofer at Munich, and later under Baron Liebig. Dr. Fodor was, after his master Pettenkofer, the best known of the European sanitarians, and did much toward rendering Budapest the healthy and beautiful city it now is. He was a man of many gifts and was for some time joint editor of the medical journal *Orvosi Hetilap*.

The rich family of Mitsui, of Tokio, has offered an extensive site in that city for the erection of a university for women, and three other citizens have, between them, contributed a sum of \$120,000 for the cost of the necessary buildings. The work is already in progress, and it is hoped the new university will be opened the coming spring. It is not likely there will be any want of students, as, in recent years, very many young ladies of good family have applied to be admitted to the university courses, especially to the Faculty of Medicine and the Polytechnic School. The latter institution is intended for the training of civil engineers, a circumstance which seems to show that Japan is about to set an example to Europe in opening up a new sphere of labor for the women of the future.—*Med. Times*.

Heroism of a Royal Army Medical Corps Officer.—The president and council of the Irish Medical Schools and Graduates' Association entertained, on Saturday, March 16th, a distinguished company at dinner at the London Hotel; Cecil, Lord Roberts being in the chair. The occasion was the presentation to Captain Charles Dalton, R. A. M. C., of the Arnott Memorial Medal for his bravery at Chieveley, South Africa, on January 23, 1900. Mr. David Arnott is the donor of the medal, which he presented in memory of his late father, Sir John Arnott. It has fallen to the lot of Captain Dalton to be the first to win this distinction. The 14th Hussars, to which regiment the doctor was attached, were taking part in a reconnaissance near Chieveley, and it became known that an officer of the South African Light Horse was lying wounded within the zone of fire. Captain Dalton forth-

with obtained permission to go and dress his wounds. This he was proceeding to accomplish when the Boers fired a volley at them, at one hundred yards range, paying no attention to the Red Cross flag carried by the doctor's orderly. The result was that the orderly was shot dead and the doctor received a bullet wound in the abdomen.—*The London Sketch*.

The Doctor's Fee.—What fee a doctor should charge has always been an unsettled question. There is no limit to the amount as to what a physician or surgeon may charge. There must be a minimum fee established and abided by. John B. Roberts says: "There is, it seems to me, one just plan by which fees should be regulated. It is that the doctor should have an estimate of the value of his services, operative or otherwise, fixed in his mind. The amount should be based on his experience and skill. It should not be so low as to coax away unjustly the patients of the younger and less experienced men of the profession. This fee should be lessened when the financial position of the patient would make its payment a serious burden. It is not professional or humane to take a man's income for a whole year, to pay for the doctor's bill of a whole month."—*Charlotte Med. Journal*.

The Rockefeller Institute for Medical Research.—The generosity of Mr. John D. Rockefeller has established an institute, to be known as the Rockefeller Institute for Medical Research. The purpose of the foundation, as the name implies, is to furnish facilities for original investigation, particularly in such problems in medicine and hygiene as have a practical bearing upon the prevention and treatment of disease. The sum of \$200,000 has been placed at the disposal of the board to begin the work, not as an endowment, but to be used in a series of years for current expenses. The home of the institute will be in New York, although, as will be evident from the make-up of the board of directors, medical men from neighboring cities will share in its management. The board, as at present constituted, is as follows: President, William H. Welch, M. D., Baltimore; Vice-President, T. Mitchell Prudden, M. D., New York; Secretary, L. Emmett Holt, M. D., New York; Treasurer, C. A. Herter, M. D., New York; members, Theobald Smith, M. D., Boston; Simon Flexner, M. D., Philadelphia; H. M. Biggs, M. D., New York.

It is not intended to build at once, but with the funds placed at the disposal of the board, research work will be begun under its direction in several different places. The immediate aims of the

board are two-fold. First, to shape the lines of the work along which the institute may wisely develop, both in contributions to knowledge and in the application of existing knowledge to humane ends. It is felt that when this is done, such local habitation as the future of the institute shall require can be more wisely planned. The potential value of an institution of this kind, and under such auspices, to medical science and to the interests of humanity can hardly be over-estimated.

Electric Light Least Injurious to the Eyes.—An English journal named *The People* has the following item of news: "A Russian medical man has decided that the electric light is least injurious to the eyes. He says that the oftener the lids are closed the greater the fatigue and consequent injury. By experiments he finds that the lid would close with different illuminations per minute: Candle light, 6.8; gas, 2.8; sun, 2.2; electric light, 1.8."

Ether as an Anaesthetic.—Dr. Edward Judson Wynkoop (*N. Y. Med. Rec.*) believes that the time is ripe for the profession to support a man who makes it his business to give anaesthetics and to administer them properly. He advocates the use of ether as being the safest of anaesthetics, but he believes that this fact should not lessen our caution, and he asks for a more detailed study of this important subject in our schools and hospitals.—*N. Y. Med. Jour.*

St. Paul's Prescription for the Physicians—The *St. Paul Pioneer Press* for June 4th has a cartoon showing an anything but ascetic St. Paul, with a nimbus of modern construction worked by an incandescent light, presenting to "the M. D.'s" a large bottle of medicine labeled "Welcome," with the words, "Take three big doses of this every day, in water or something else." St. Paul did more than prescribe; it provided the medicine as well as the "something else" to take it in—the excipient—and, what is more, saw that it was taken.

Mrs. McKinley's Illness.—The physicians in attendance on the President's wife issued on Saturday last the following statement of the character of the illness from which she has been suffering: Mrs. McKinley's illness has been a blood infection, resulting from periostitis of the index finger, which began in Los Angeles, and which was promptly treated by incision. The subsequent condition of exhaustion was due to the same blood infection, associated with a severe diarrhœa. She improved, however, and

was brought home in comfort and without loss of strength. The principal cause of anxiety in her case since her arrival in Washington has been an acute endocarditis, involving the mitral valve, the result of the same blood infection. This does not appear to be progressive, and there has been an improvement in the diarrhoea and in her general condition. Mrs. McKinley's case at the present time presents a more hopeful aspect.

A Queer Verdict.—A dispatch from St. Louis to the *New York Times* says that the head of a man, wrapped in an old coat, was found recently in East St. Louis, and when the coroner held an inquest over it a verdict of suicide was returned.

The Providence Medical Journal for April publishes an account of a boy whose vision was 1-50th, who was wearing concave spherical lenses of 12 dioptries, when he required convex lenses of 9 dioptries; a difference of 21 dioptries. Another case, a lady, had her glasses changed four times in as many months by a refracting optician, who had albuminuric retinitis, and who died shortly after a diagnosis was made.

A Physician's Claim for \$100,000.—Dr. Emma N. Warne, a woman physician of Chicago, has filed a claim for \$100,000 against the estate of a Mr. Wheeler, who died a year ago, leaving \$3,000,000. The claim is based on a special contract for medical services and personal attention paid to Mr. Wheeler, the terms of the contract reading that Dr. Warne was to "take care of Mr. Wheeler as long as he lived." The physician's services are said to have extended over several years.

A Photographer Violates the Health Laws.—A photographer in Plainfield, N. J., was recently fined \$50 for taking the picture of a child who had died of diphtheria. The charge was that he had broken a health board ordinance in going to the house where there had been such a disease. He explained that he had taken the portrait at the request of the child's father, and declared that he had not been informed of the nature of the disease from which the child had died.—*Medical Record*.

The use of diphtheria serum in Italy, and other countries as well, is likely to receive a severe check, says the (London) *Chemist and Druggist*. The Seropathic Institute of Milan made a batch of serum on November 24th into which the tetanus bacillus was accidentally introduced. The result has been that eight persons on whom the serum was used have met with horrible deaths from

tetanus. The institute was immediately closed, the serum was destroyed, and an effort made to recall all supplies in the hands of dealers. The accident naturally caused a great scare in Italy.—*Med. Times.*

Painless Removal of Adherent Dressing.—Patients as well as practitioners, are familiar with the suffering entailed by the removal of gauze dressings, these dressings having the drawback of adhering very closely to granulating surfaces owing to their loose texture. Anesthesia has abolished the pain attending surgical operations, but leaves the patient exposed to the pain of repeated renewal of the dressings. Dr. von Mikulicz, of Breslau, suggests an easy means of obviating this drawback, viz., by wetting the dressings with oxygenized water. This provokes a copious evolution of bubbles of gas, the mechanical effect of which is to free the gauze and allow its removal without causing pain. The method is so simple as to deserve the notice of surgeons.—*Med. Press and Circular.*

Medicine in Thibet.—Dr. Susie Carson Rijnhart, in her book, "With the Thibetans in Tent and Temple," says that there is no medical art worthy to be called such in Thibet. She writes: "For headache, large sticking plasters are applied to the patient's head and forehead; for rheumatism, often a needle is buried in the arm or shoulder; a tooth is extracted by tying a rope to it and jerking it out, sometimes bringing out a part of the jaw at the same time; a sufferer with stomach-ache may be subjected to a good pounding, or to the application of a piece of wick soaked in burning butter grease, or, if medicine is to be taken internally, it will consist probably of a piece of paper on which a prayer is written, rolled up in the form of a pellet, and, if this fails to produce the desired effect, another pellet is administered composed of the bones of some pious priest."

The New Institute for Massage at the University of Berlin.—This institute was opened in December, 1900. Its purposes are to teach massage in all its phases to students and physicians. Half-yearly courses are given, but there are also shorter courses of four weeks each, including lectures and practical exercises. At first the students practice the various movements on healthy, well-nourished persons who are specially paid for submitting to this massage at the designated hours. Then patients are assigned to the students, and they are required to administer the proper massage treatment as outlined by the lecturer. In this way the technique

and the indication for the various forms of massage are taught. The institute also instructs nurses in massage, the course lasting several months, and being chiefly practical.—*Ex.*

Habitual Constipation.—Inject eight ounces of tepid water on retiring, and allow it to be retained until absorbed. Increase the quantity progressively each night while lowering the temperature of the water. If necessary, give an ordinary injection in the morning. Four to six weeks suffices to establish unaided defecation.—*Klemperer, Med. Rec.*

A bill to insure the better education of opticians has been introduced into the Illinois legislature. It provides that six months after its passage it shall be unlawful for any unregistered optician to practice as an optician, under a penalty of not less than twenty-five dollars, nor more than a hundred dollars, for the first offense, and double the penalty for each succeeding offense. The state board of opticians is to consist of five opticians, appointed by the governor, to hold office for five years.—*Ex.*

Discovery of New Antiseptic.—According to the dispatches in the lay press, an important discovery in the science of antiseptics, upon which Drs. Frederick G. Novy and Paul C. Freer have been working for over a year in their respective laboratories, has just been made public. The new antiseptic is organic acid hyperoxides. In a watery solution five one-thousandths of 1 per cent. of active oxygen derived from the hyperoxides is fatal to all bacteria. The hyperoxide which was used for the experiments is benzozlacital, and this, as was shown by experiments on dogs, can be taken internally in large doses without poisonous effect. The discovery promises to result in still other developments of importance.

Thomas A. Edison has invented a new storage battery which electricians say is the most important invention since Edison discovered how to make incandescent lamps, the lamps that give all the delightful glory to the exposition of the Americas now being held in Buffalo.

The announcement of the invention of this new battery is accompanied by intimations that indicate several fields are to be revolutionized by its introduction, for this new battery combines all of the long-sought advantages of durability, effectiveness and lightness. It is predicted that a new art of electrical propulsion and navigation will result. While the electrical accommodations of the

people to-day are many and important, new features of usefulness are promised. Electric light will be cheapened, and it will be possible for electricity to win favor in many factories where the steam engine and its power reigns supreme. This battery is said to be a wonder, and it may be the instrument which will carry the stored energy of Niagara around the world. It may result in the force of the Falls of Niagara being shipped by the car load instead of being transmitted over miles and miles of cables as at present to its fields of service. Many new applications of electricity are looked for, and there is little doubt but what this battery will do much for the advancement of electrical science during the 20th century. Its use will reduce the weight of automobiles, and make electrical features on ships more available. There is a possibility that its application to railroads will retire the present trolley system, a system that has been very efficient in affording rapid transit.

And the best of all is that this battery of the famous Edison is not to be locked up for a favored few to look at and enjoy, but it is to be placed on exhibition in Edison's space in the Electricity Building of the Pan-American Exposition, where the world can view it and admire this latest and most important invention to their hearts' content. Present prospects are that it will be impossible to get the battery in place in the Electricity Building before the latter part of June, owing to a lateness in allowing the patents, but this incident simply goes to show how thoroughly up-to-date the Pan-American Exposition aims to be, to have its exhibits include such very late and important inventions.

For over forty years the world has been hopeful of improvement in the storage battery. An enormous amount of labor has been expended, and capital unlimited has been used to effect the improvements recognized as essential ere the storage battery could become popular. Efforts of recent years have been directed to reducing the weight, but with little result until Mr. Edison accomplished his results. The great weight of the majority of the storage batteries of to-day has been a great obstacle to their use, and for about twenty years these conditions have remained unchanged. Now, through the inventive genius of Edison, something different is promised, and never yet has Edison deceived the public as to the true merit of any of his inventions.

A storage battery is simply a reservoir in which electricity may be stored and drawn upon for the purposes for which electricity is generally used. It can be transported on a launch or an automobile or any other vehicle that travels over land or on water.

When a battery is full it is said to be charged. Heretofore the storage batteries were very bulky and heavy, which naturally are serious drawbacks, but this new Edison battery changes all this and gives a wider range of usefulness to the invention. In the old battery there was a deterioration when used, and it is easily destroyed, but when Edison started out to solve the problem of the storage battery and develop a machine that had a higher efficiency he realized that a successful battery must possess absence of deterioration by work; large storage capacity, capability of being rapidly charged and discharged; capability of withstanding careless treatment, and it must be inexpensive.

The new battery is made up of cells known as nickel-iron cells, and the electrolyte is potash. The charging and the discharging rates of the cells are alike. The cell may be charged at a normal rate in three and a half hours, or it may be charged at the relatively high rate of one hour with no apparent detriment to the cells, except for a somewhat lower electrical charge efficiency. In other words, the cells do not appear to be injured by the overcharging or the discharging, and only suffer in electrical efficiency under such treatment.

Another advantage claimed for the cells of this new battery of Edison's is that they may be subjected to very low temperatures without danger of detriment. Moreover, the electrolyte-potash does not attack any of the ingredients of the cell, nor are any of the ingredients soluble therein. The battery is therefore theoretically indestructible. An instance of the indestructibility of the cell is this: A cell was not only completely discharged, but it was recharged in the reverse or wrong direction, and after bringing it back to its originally charged current, the storage capacity remained unaffected. From this it would seem that the cell should be capable of standing much abuse.

The public is greatly interested in the development of the automobile industry, and it may be remarked that no recent invention will do so much to shove the automobile along the road to further popularity than this light, efficient battery of Edison's invention.

In the Electricity Building at the Pan-American Exposition the Edison space is near the west end, and it is there space has been reserved for the new invention. Few things on exhibition will command more attention than this wonderful battery. It is 24 years since the telephone was exhibited at the Centennial in Philadelphia, and visitors to the Pan-American Exposition will

naturally wonder if the next quarter of a century will show an equal popularity for the storage battery as the last has for the telephone.

Prospects are that within 25 years storage batteries of all sizes will be purchable at the stores in packages, the wrappers on which will rival those of the various food products for beauty. It is this possibility and its revolutionizing tendency that excites such widespread interest in the marvelous storage battery that is first to be exhibited at the Pan-American Exposition.

Warts.—First pare the wart, then thoroughly apply some solutions of bichromate of potash for a few moments once or twice daily, and it will soon leave the surface smooth.

Healing Burns.—As the granulations form and tend to exuberate a better cicatrix than otherwise can often be secured by brushing over the surface a strong solution of nitrate of silver or passing over the granulations with a solid stick of silver.—*Pediatrics*.

Guaiacol applied locally seems to be a safe and efficient remedy in relieving the pain of arthritis deformans, acute articular or muscular rheumatism, sciatica, orchitis and epididymitis. One part of guaiacol to ten or fifteen parts of vaselin or lanolin should be applied to the painful parts.—*N. E. Med. Monthly*.

Nervous Cough.—It is well to remember hyoscyamus in those cases of "nervous cough" that are so troublesome to cure. Usually, the cough is dry, and worse when the patient is in the recumbent position. Hyoscyamus is many times the remedy for whooping cough. We believe that it will prove beneficial in a greater number of cases of this disease than belladonna, which is a generally recognized whooping-cough medicine.—*Chi. Med. Times*.

For constipation in infants and small children, cathartics ought not to be given. Instead, let a small quantity of glycerine—a half teaspoonful—to which has been added a few drops of water to make it flow, be injected into the rectum by means of a small hard rubber syringe. This may be repeated every day when the act of evacuation does not take place naturally. The effect of the glycerine is that of a mild stimulant to the rectum, the result of which is expulsion of its contents. No harm can come of this treatment, while much damage does come from the use of cathartics.—*Amer. Med. Jour.*

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Original Articles.

OPINIONS IN RELATION TO THE QUESTIONS OF THE
SPECIAL COMMITTEE OF THE AMERICAN MEDICAL
ASSOCIATION REGARDING THE PROGNOSIS
AND TREATMENT OF ACUTE GONORRHEA IN
THE MALE.

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REPLY OF PROFESSOR NEISSER.

(1) Is gonorrhœa curable—so curable that the physician can confidently say to the patient: You may marry now. You run no risk of infecting your wife?

In practically all cases which have been properly treated,
Yes.

(2) In what proportion of cases is it curable; a, in anterior urethritis; b, in posterior urethritis?

It is impossible to name definite percentages. The prognosis of anterior urethritis—as regards complete recovery—is very good, as the disease is so situated as to be accessible to effective local treatment. Posterior urethritis, on account of its relative inaccessibility and the frequency of prostatic involvement as its accompaniment, is much more serious. But even here the prospects of rendering its victim non-infectious and of curing his affection—though much diminished as compared with anterior urethritis—are by no means unfavorable. Complete recovery can be obtained only through prolonged treatment and especially constant and careful attention to the condition of the prostate gland.

(3) What methods of treatment in your experience give the

most prompt and certain results; (a) in acute cases; (b) in chronic cases?

The object of our treatment should be to destroy and remove the cause of the disease, the gonococci, in all cases in which these micro-organisms are found. While general or localized, objective or subjective, symptoms are to be treated as a matter of course, yet the main part of our therapeutic efforts should be directed against these bacteria, whether the case be acute or chronic. Their removal is the first essential in curing the disease.

Remedies suitable for use as gonococcicides should possess the following qualifications:

1. They must be capable of promptly destroying the gonococci when used in solutions of such strength as to be unirritating to the urethra.
2. They should be capable of a deep penetrating action; not merely a superficial one.
3. They should, to be effective germicides, be free from astringent properties.
4. They must not enter into chemical union with albumen, mucin or chlorine of the tissues.

Unsuitable remedies (in this stage of the disease) are the simple astringents. They do not destroy the gonococci and, by conveying them to healthy parts, are liable to spread the infection.

Antiseptic remedies which possess markedly astringent properties are not suitable for this stage of the malady as their constricting effect upon the tissues prevents them from penetrating into the deeper layers of the epithelium and destroying burrowing cocci, or entering the many tiny urethral glands and pocket-like folds of urethral mucous membrane.

Dangerous in the early stages are all mechanical or semi-mechanical methods requiring the use of the endoscope, sounds, etc.

Remedies which fulfill more or less perfectly the requirements are:

Protargol. For the anterior urethra $\frac{1}{4}$ to $\frac{1}{2}$ per cent. solution. For the posterior, 1 to 3 per cent.

Argonin. For the anterior urethra 1 to 4 per cent. solution, For the posterior, 2 to 4 per cent.

These are the least irritating of the silver salts. Of the two, protargol possesses the stronger germicidal action.

Largin. For the anterior urethra $\frac{1}{4}$ to $1\frac{1}{2}$ per cent. solution. For the posterior, 1 to 3 per cent.

Argentamin. For the anterior urethra 1 to 6000 to 1-4000 solution. For the posterior, $\frac{1}{4}$ per cent. to $\frac{1}{8}$ per cent.

Oxycyanate of mercury. For the anterior urethra, 1-5000 to 1-3000 solution. For the posterior, 1-10 per cent. to $\frac{1}{2}$ per cent.

The last three preparations are all excellent germicides, but much more irritating than protargol and argonin. They are therefore indicated in the later rather than the first stages of the infection.

Suitable methods of application are:

The Janet Irrigations.—These on account of the time, care and skill which their employment demands are practicable only to the inmates of private hospitals and patients of large means.

The prolonged injections are as effective as the Janet irrigations in nearly all anterior urethritis cases, and on account of their convenience and simplicity are possible and practical to all classes of patients.

Posterior urethritis (acute) is best treated by the injection, by means of a Guyon syringe and catheter a boule, of an antiseptic, nonastringent solution.

Chronic cases are to be treated with bactericidal solutions as long as gonococci are found in the secretions, and for some time afterward. When the discharges of the urethra have been proved to be constantly free from the gonorrheal virus, astringent remedies may be used.

(4) What period of time should elapse after the disappearance of the last evidence of the presence of the gonococcus before the patient should be allowed to marry?

The patient may be allowed to marry when, after most careful, thorough, and oft repeated examinations, the physician is able to state that to the best of his knowledge and belief, gonococci are not to be found in the patient's genito-urinary secretions, even when provocative mechanical or chemical measures are used. The question deals with the infectiousness or non-infectiousness of the patient, and the element of time between the date of the last gonorrhoea and that of the contemplated marriage is secondary to the question of the presence or absence of the gonococcus.

(5) Upon what tests do you rely in order to determine positively whether the patient is wholly free from the gonococcus?

We do not, today, possess any test or tests which enable us to declare with *absolute certainty* that "the patient is wholly free from the gonococcus." When considered from a *practical* rather than a purely academical standpoint, however, our present methods

of examining and "testing" the patient are such as to deserve our entire confidence, and when these have been carried out in a thorough, careful and intelligent manner, by one skilled in their use, the obtaining of a clear, negative result will justify the physician in saying to the patient "You may marry now. As far as I am able to judge, you will not infect your wife."

As the question of the patient's infectiousness or non-infectiousness is simply one of the presence or absence of gonococci, our efforts must resolve themselves into searching with all possible care the secretions of the entire genito-urinary tract for this micro-organism. The microscopic examination (if possible with an *apochromatic* oil immersion lens) should be very frequently made, and must cover a period of time in direct proportion to the suspiciousness of the patient's history or symptoms. Methylene blue may be used as the regular stain and Gram's method used in each instance where doubtful cocci are seen. The culture method can be reserved for exceptional cases.

The production of artificial urethritis is effected through the employment of chemical or mechanical means. Chemical:

The injection into the anterior and posterior urethra of solutions of:

Corrosive sublimate 1-15000 or stronger.

Argentamin 1-3000 or stronger.

Nitrate of silver 1-1000 or stronger.

Oxycyanate of mercury 1-2000 or stronger.

Mechanical: The introduction of sounds, bougies, bougies a boule.

The intentional irritation of suspicious spots and localities in the urethral mucosa by the use of the endoscope and instruments introduced through it.

The secretions of the follicles of Littre and the contents of the Morgagni and other recessed folds of the mucous membrane may be expressed by the use of the bougie a boule, or obtained by means of the endoscope. The prostatic secretion is obtained by first irrigating the whole urethral canal and bladder and then massaging the gland through the rectum.

REPLY OF DR. E. C. BURNETT, OF ST. LOUIS.

1. In regard to the question, "Is gonorrhea curable, so curable that the patient may marry without risk of infecting his wife?" I would answer YES; and I base my answer upon the number of cases within my experience that have been so cured, and, having

married, have not infected their wives, though many years have since passed.

2. "The proportion of cases in which it is so curable?" I would state that, taking again as a basis my own experience, provided gonorrhoea is the only disease present at the time, fully 100 per cent. are so curable, in both anterior and posterior urethritis.

3. As to the methods of treatment which, in my experience, have given the most prompt and certain results? (a) In acute urethritis I have found that irrigations of the urethra with germicide solutions—warm or cold, as best suits the particular case—together with the internal administration of such drugs as may be indicated by the conditions present in each case, have given me the most prompt and certain results. When it is convenient I give the irrigations myself, as I have found that I obtain the best results by so doing. The strength of the solution varies in different cases and at different times in the same case, as I am always careful to use such strength as will give the greatest germicide values with the least irritation of the urethra. The number of irrigations daily vary from one to three during the acute stage. In the majority of cases the irrigations are given three times daily for the first ten days or two weeks, gradually lessening the number to one daily, and continuing this number in conjunction with applications of some one of the stimulating preparations, until the mucous membrane is thoroughly healed. I do not begin the use of stimulating medicines until the acute symptoms have subsided, and the choice of preparation depends upon the effect it may have upon the urethra, avoiding the use of such as may irritate or increase the inflammation.

The conditions under which I administer drugs internally are, an irritating urine, either through over-acidity or over-alkalinity, and that condition which may call for its sterilization.

(b). In chronic urethritis: For the first few days irrigations with mild sterilizing solutions, then endoscopic inspection of the whole urethral tract, if possible. If the disease is confined to circumscribed patches on the mucous membrane, applications of stimulating medicines in strengths varying to suit, are made to these patches through the endoscope every four or five days, employing in the interval irrigations or injections of a mild astringent solution as often as they are indicated. If the disease is more diffuse, the medicine is applied by means of irrigations, injections, or instillations. If stricture or thickening of the urethral wall is present, gentle dilatation is employed in conjunction with the above

treatment, and continued until the urethral calibre and elasticity become normal. When posterior urethritis is complicated with prostatitis, if it is acute, local treatment of the urethra is suspended until the inflammation of the prostate has subsided through rest and quiet in bed, counter irritation by means of hot applications to the perineum, or injections of hot water into the rectum, thorough emptying of the bowels by means of purgatives, and the internal exhibition of such medicines as will tend to allay the pain and irritation consequent upon this condition.

Sub-acute prostatitis is treated by gentle massage of the gland at the same time that the treatment of chronic urethritis is being carried on. If the disease has invaded the seminal vesicles, this condition is treated by stripping the seminal vesicles every four or five days through pressure upon them by means of a finger introduced into the rectum. This treatment is kept up some time after the seminal fluid has again become normal, the absence of pathological products in the seminal fluid being demonstrated by microscopic examinations from time to time.

4. Regarding the period of time that should elapse after the disappearance of the last evidence of the presence of the gonococcus before the patient should be allowed to marry, I would state that, in my experience, it is unsafe to depend upon the disappearance of such evidence. Of course, while the presence of even the smallest number of gonococci can be demonstrated, there is still danger of infection. Yet, the fact that they have not been found in the discharge for some time, or that all perceptible discharge has disappeared, does not prove that they may not be present among the tissues of the urethral mucous membrane. Therefore I date the time that should elapse before the patient is fit to marry from the period when the mucous membrane of the genito-urinary tract is as near the normal as it is possible to get it; and I find that the time must vary within limits of from six weeks to as many months.

5. Upon what tests do I rely in order to determine positively whether or not the urethra is wholly free from the gonococcus and is no longer infectious? I would say that I know of no test which will positively determine the freedom of the genito-urinary tract from the gonococcus. At best our tests are only negative. Microscopic examinations will demonstrate whether or not it is absent from the secretions of the genital tract with reasonable certainty; but since the investigations of Finger upon cadavers have shown that the gonococcus may be found among the tissues

of the mucous membrane of the urethra many months after a clap has ceased, we can never know when the urethra is free from it. Experience has taught us that gonorrhoea is a disease that has a natural limit to its activity; that it runs an acutely virulent course for a few days, then gradually declines in activity until a period is reached when the original virus, *per se*, seems to play no part in the disturbances that are still present in the genito-urinary tract. These disturbances are the result of the damage done by the gonorrheal inflammation to the anatomical structures over which it has swept. This structural damage, in a great many cases, heals itself by Nature's processes, as those who have watched the course of the disease in the days of internal treatment well know. In a great many other cases, however, the damage does not repair itself, and even though in some there may be complete absence of subjective symptoms, and though years have elapsed since the gonorrheal inflammation which caused it has subsided, the damage persists, and to this impairment is due a greater susceptibility of the genito-urinary tract to influences which tend to irritate and excite these parts. Under such irritation and excitement the period of quiescence is broken, gonorrheal germs, which have remained latent until now, are stirred into activity, their virulence is renewed to a certain degree, and we have a recurrent gonorrhoea which, while it does not, as a rule, affect the patient to as severe an extent as at first, contains all the elements of virulence so far as the power to infect is concerned, and communication to another is possible.

The two most powerful factors in the creation of sexual disturbances are alcoholic stimulation and excessive sexual excitement; and when these two are combined their potency for ill is very much increased. Under the effects of these two factors, acting either alone or conjointly, we may have a recurrence of gonorrheal inflammation in a urethra that has been for years, to all practical appearances, cured of a former attack. That these cases are recurrent gonorrheas is proven by the fact that the inflammation usually begins in the deeper parts of the urethra—parts too remote for a new infection to affect immediately; and careful comparison of the subjective symptoms in these cases with those present in a new infection, together with ocular inspection of the urethra by the surgeon, will demonstrate this fact conclusively. On the other hand, experience has taught us, too, that sexual rest, besides hastening the cure of a gonorrheal inflammation, brings about conditions most favorable to a prolongation of the quiescent

stage into which the gonorrheal germ has fallen, and upon the conduct of the patient in the regulation of his habits to this end much depends. By the term "sexual rest" is not meant total abstinence from sexual intercourse. For while, by the avoidance of everything that tends to excite the sexual apparatus unnaturally, we may attain to a high degree of sexual quiet, yet there is a quality beyond that which is only obtained through purely physiological sexual intercourse. So if, after we have repaired the damage done to a urethra by gonorrhea, we find after an interval of time which varies as to length in different cases from a few weeks to as many months, that there is no more discharge, and, upon inspection through the endoscope, the urethral mucous membrane appears healthy, we can then assure our patient that he is in a condition to marry without danger of infecting his wife; but, that upon his conduct in the future depends the perpetuation of this practically healthful condition. For, if he is temperate in his habits and true to his marriage vows, regarding with especial obedience the seventh commandment, his former gonorrheal sins shall not be visited upon his wife.

E. C. BURNETT, St. Louis.

TWO CASES OF SYPHILIS; ONE WITH VERY PERSISTENT LESIONS, THE OTHER CONGENITAL WITHOUT ANY KNOWN LESIONS IN IMMEDIATE FAMILY.

BY

D. S. HANSON, M. D.

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Mr. M., a married man, age thirty-eight, called at my office Nov. 1, 1899, complaining of swelling in groin and a small ulcer on penis. The latter was indurated, clean cut margins and in every way a typical Hunterian chancre, while inguinal glands of one side formed quite a large and tender bubo. Prescribed Hydra Protoid gr. $\frac{1}{4}$ three times daily, and dusted ulcer with calomel. The latter healed rapidly and bubo subsided without supuration. Dec. 14 he began complaining of sore throat and a macular eruption began to appear on skin, continued Protoiod with chlorate of potash gargle for throat. Dec. 24 a diffuse swelling of elbow joint with pain and rigidity was present, the swelling was not an effusion into joint, but infiltration in and around joint producing fusiform swelling which completely disabled arm,

motion being very much restricted. Ordered oleate of mercury 10 per cent. in lanolin to be well rubbed into joint two times daily and continued the same internal treatment. Jan. 2nd the joint had so far improved that he resumed work, rash was disappearing and throat was nearly well.

The constitutional treatment with the mercury was followed for about six months, then the bichloride with iodide of potassa was used for a few weeks, when protoidide was again used and for last few months the iodide of potassa alone. Shortly after skin, arm and throat had gotten well mucous patches appeared in mouth, on tongue, lips and inside of cheeks and persisted in spite of applications such as hydrastis, chlorate potassa, boroglyceride, Seiler's tablets, peroxide of hydrogen, etc., etc., for more than a year constantly, and even yet mouth is not well more than a few days at a time unless local applications are constantly used. The persistence of mouth lesions and acute swelling of elbow joint during early manifestation of the disease being the peculiar features of case.

Nov. 29, 1899, I attended Mrs. L—— in confinement, this being second child, first one living and healthy. The father died with typhoid fever five months before birth of last child. I had personally known both families and been their family physician for years and never had any reason to suspect syphilis in either family further than the fact that father's mother, a woman about forty years of age, had an attack of psoriasis that resisted all treatment until full doses of iodide of potassium was used, when skin cleared up like magic. This lady absolutely denies all acute or secondary syphilitic lesions, and her mother never showed any signs of this disease; her father I never saw; her children are not syphilitic or at least no signs of this disease have ever been apparent.

This baby began having snuffles when about a week or ten days old and at twenty days nose was very much obstructed and child had a weasened, wrinkled appearance characteristic of hereditary syphilis—no rash on skin. Prescribed hydro cum creta gr. $\frac{1}{4}$ two times daily, with oleate of mercury 2 per cent. solution in liquid vaseline locally with rapid improvement, and after a few weeks' treatment child appeared normal and has since developed well. Iodide of potash was continued for some time after course of mercury.

The interesting feature here is the matter of heredity, no syphilis being present in family excepting the tertiary lesion of

child's grandmother. The father of child never having suffered from the disease and mother is healthy, never having had any trouble pointing toward this disease. Cases like the latter speak only too plainly to the physician that syphilis is ubiquitous and is liable to crop out almost anywhere.

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REMARKS ON PELVIC CELLULITIS.

BY

BYRON ROBINSON, B. S., M. D., CHICAGO.

The diagnosis of cellulitis is important but difficult. Pelvic cellulitis consists in inflammation of the subserosum lying between the levator and muscle and the blades of the ligamentum latum. An important aid in the diagnosing of cellullitic exudates is the laceration of the cervix, physiologic, or, especially pathologic, where the laceration passes proximally on the uterus through the lateral vaginal fornix amply sufficient to allow infection to enter directly the peritoneum or subserosum pelvicum.

Since the pelvic subserosum fills the space adjacent to the uterus (para-metritis), rectum (para-proctium), bladder (paracystium), oviducts (para-salpinx), and overlying peritoneum inflammation of this connective tissue presents symptoms of disturbances in the adjacent organs, especially in the bladder and rectum. We will limit, for convenience, the parametrium to the lesser pelvis. Pelvic cellulitis arises in two forms, viz: (a) the exudative and (b) the contracting form. As the cellullitic exudation is of considerable importance in gynecology some details will be noted. (a) The cellullitic exudates with acute stage arises as a gelatinous mass possessing an elastic consistence and located in the subserosum. If the oedema becomes absorbed and the deposited fluid coagulates the cellullitic exudate presents a tumor-like consistence, gradually hardening and consolidating. It can become entirely absorbed. But frequently a thick cicatricial mass remains which by progressive contraction, atrophy, dislocated adjacent viscera and uterus and bladder. The cellulitis may slowly attack different segments of the pelvic subserosum, the absorption and contraction both being defective and varying results in variation of form and size. The cellullitic exudates may suppurate, forming small abscesses which coalesce and generally assume a definite exit route.

The diagnosis of cellullitic exudate rests on the palpation of a

tumor in the pelvic subserosum external to the peritoneum, which assumes suggestive position, shape and connection. The cellulitic tumor must always be palpable in the parametrium or in one of its radiating processes, most frequently the parametric exudate is formed in the posterior lateral segment of the horizontal layer of the parametrium. It is thus felt as a tumor posterior and lateral to the uterus and may extend to the opposite side of the pelvis subserosum between the cervix and rectum. It may be palpated in the retro-uterine connective tissue between anterior rectal and posterior vaginal wall, but this is rare so far as my experience extends.

Puerperal cellulitic exudates life between the blade of the ligamentum latum and may extend proximal to the pelvic brim, forming large tumors which distort the uterus as regards its subserosum. I have several times operated for large puerperal parametric exudates which have extended over the pelvic brim, into the iliac fossa and if of the staphylococcus variety they may pass up to the retro-renal tissue. Palpation may demonstrate such an exudate to be independent from the uterus or peculiarly connected to it by the ligamentum latum. The exudate may extend forward to the inguinal ligament to the anterior abdominal wall, into the ovum Retzii. It may lift proximalward the anterior blade of the ligamentum latum and invade the connective tissue adjacent to the bladder. The exudate seldom ascends as high on the anterior abdominal wall as it does on the dorsal wall as the connective tissue external to the peritoneum almost disappears considerable distance distal to the umbilicus. The cellulitic exudate rarely extends to the pelvic subserosum of the utero-vesicle pouch, but if it does it forces the serosa between uterus and bladder, proximalward and radiates laterwards into the parametrium. If the cellulitic exudate suppurates it may leave the pelvis by a fistulous tract over the iliac crest, over or under Poupart's ligament, through the perineum, vagina, rectum, bladder or ischial foramen. The puerperal cellulitic exudates of the staphylococcus or streptococcus variety travel slowly, pass over large sub-peritoneal areas and frequently last six months to a year or more. Peritoneal section should rarely be performed, but sub-peritoneal incisions should either give exit to pus or prepare a drain to hasten its discharge.

The shape of the lateral pelvic cellulitic exudate is extraordinarily various, according to the form of the connective tissue in which it spreads. If the exudate is largely bordered with the peri-

toneum it is quite round for the peritoneum yields, while if the exudate progresses through healthy subserosum the shape is more irregular and diffuse. If the exudate is bordered by an organ as the uterus, rectum, bladder, or pelvic wall, it assumes a sharp outline. The exudates of the horizontal connective tissue layers of the parametrium are quite flat, especially in the distal surface; they surround the rectum and pass along the vaginal wall distalward and radiate toward the pelvic wall. Intra-ligamentous exudates are found proximally when covered by the peritoneum, and forming the blades asunder, broad distally where they lie on the horizontal connective tissue layers and laterally lose themselves gradually. The exudates of the lateral and poster-pelvic and abdominal walls, especially in the puerperium, represent wide, thick, irregular masses. Those of the anterior abdominal wall present a thick base distally and their border proximally assuming automatically the mold of subserosum in their respective territories. Through absorption the shape of the exudate variously changes, the thinnest layers, periphery and borders manifest the most change, while the thicker masses resist changes in outline for longer periods. Also the shape becomes rapidly and manifestly changed when a small isthmus or band becomes absorbed.

The connection of the cellulitic exudate with the adjacent structures is important, as it is through its connections that it is differentiated from other tumors. If the pelvic cellular exudate meets an organ on the pelvic wall it spreads out as a wide base, making a very intimate connection. In abdominal operation for the puerperal subperitoneal exudates one can observe how peculiarly intimate the broad base applies itself to the uneven bony surface as the iliac fossa, pelvic brim and how the peritoneum is projected toward the abdominal cavity in round, smooth prominences. In vaginal sections for the same one can direct the finger through the exudates between the broad ligament showing its connection with the uterus. The exudate can be intimately connected with the uterus only where there is ample connective tissue as the cervix especially on the lateral and to some extent on the anterior and posterior surfaces. The para-metritic exudate extends especially easily toward the peritoneal cavity, i. e., in the direction of the least resistance. Hence, it will spread particularly between the blades of the ligamentum latum. If the exudate stands in connection with the vagina, which it frequently does, the vagina spreads intimately over it and will not glide or shift on it. The parametritic exudates surround the rectum like a rigid half-moon ring, horseshoe shape,

and as it shrinks the rectum is strictured. The rectal mucosa does not shift on the exudate but remains stiff and unyielding. When the parametritic exudate has once become established and subsequently atrophies or shrinks, it alters essentially the relation of organs by dislocations. As the thin peripheral portions of the parametritic exudates become absorbed first the remnant will not always tell the tale of original connection. Besides a central portion of the exudate will remain and when the thinner peripheral portions are absorbed it is not only difficult to diagnose but its palpable origin with the uterus is lost as well as being followed by dislocated viscera. With my hand in the abdominal cavity I have sometimes been unable to exactly trace the outline of the exudate.

The mobility of the cellulitic exudate depends on its connection in the pelvis. The smaller the exudate the more mobile, while the broader its base of connection the less mobile. The more medium the exudate the more mobile, while the greater the connection with the pelvic lateral walls the less mobility it represents. Many intra-ligamentous exudates possess a high grade of mobility. The mobility of the parametritic exudate depends much on the age of existence, whether the palpation be made in the beginning or later when absorption has played a role.

The consistence of parametritic exudates varies from a soft, oedematous palpation to that of bony hardness. With ample opportunity by a competent gynecologist I have seen lateral bony pelvic tumor mistaken for parametritic exudate. Fresh parametritic exudates palpate soft, elastic and yielding, but one or two weeks later may palpate hard and non-yielding, cicatricial. They have no standard of consistence but rapidly pass from a soft to a hard condition. Carcinoma palpates more like the elasticity of cartilage. If the parametritic exudate suppurate it will present variation of consistence, present limited fluctuations in circumscribed localities, however, the peripheral segments remain still hard.

The pain in cellulitic exudates is of little worth in diagnosis as it presents no definite signs. If subsequent to an operation, post abortum or in the puerperium the patient begins with pain and a chill with continued rise of temperature and rapid pulse it may aid in diagnosis. If the doubtful tumor becomes slowly smaller by absorption it is a special good symptom that it is a parametritic exudate.

The differential diagnosis of a cellulitic exudate (extra peritoneal) plays a great role in gynecologic practice because (a) they

are so frequent, and (b) they present such a wide range of consistence and shape to palpation—thus imitating other tumors. Parametritic tumors may resemble any or all hard tumors in the region of the uterus, as myoma, pysosalpinx, haematoma, rectal carcinoma, and paracoecal exudates. They may especially be mistaken for subserous myoma, if intra-ligamentous. A myoma is round and a parametritic exudate is always round when it projects the peritoneum upward or proximal toward the abdominal cavity, but that part of the exudate which projects toward the parametrium or subserosum, i. e., the base of the ligamentum latum is generally palpable as irregular in contour. A subserous myoma is connected with the uterus either by a style or broad base between which and the uterus a furrow can be felt. A parametritic exudate is so intimately connected with the uterus that the uterus appears to lie in the exudate. Also if the exudate tends distally between the posterior vaginal wall and the anterior rectal wall a myoma is excluded. Consistence does not aid so much as contour. A myoma is all round, an exudate is round chiefly where immediately covered with peritoneum. A rectal examination reveals a round, smooth contour and definite border of a myoma, while the exudate presents an irregular contour and broad basal end, whether against pelvic wall or any viscus. Combined myoma and exudate may defy diagnosis. Mobility may belong to both myoma and exudate, especially if the exudate be in the ligamentum latum. When not forbidden (?) the sound shows elongation of the uterine cavity with myoma. Intraperitoneal (peritonitic) exudates may be easily mistaken for myoma because of their consistence, contour or long existence. However, as the peritoneal exudate hardens, becomes absorbed, it becomes irregular in contour while the myoma always presents its round contour. As in extra-peritoneal exudates, so in intra-peritoneal exudates the forbidden sound may come into play (?). Symptoms, as pain, pressure, reflexes, obstructions and oedema, between myoma and exudates are practically worthless. A history of chill, continued fever and rapid pulse speak for intra-peritoneal exudate and against myoma. Observation of the patient is the best aid to differential diagnosis. Myoma remains the same in contour, consistence, shape and connection, except slow increase, seldom atrophies, while exudates (intra or extra-peritoneal) frequently atrophy, change in consistence, contour, shape and connection to adjacent structure. A few months of careful observation almost always enable an industrious gynecologist to decide.

The diagnosis between the exudates and pysosalpinx is still

more difficult to differentiate. Until I had repeatedly attempted to diagnose and operated on the same patient I could scarcely differentiate exudate from the pysosalpinx in many cases. It is almost impossible to diagnose the difference between a pysosalpinx and some forms of peritoneal exudates, whether the oviduct is part or all of the tumor. The consistence offers insufficient knowledge as well as the contour. The position of the tumor is of more value. Parametritic exudates lie more distal on the uterus (and vagina) than the pysosalpinx. If the tumor sits proximalward on the uterus it is possible that it is a pysosalpinx. Exudates are flatter and more diffuse while oviducal tumors are at least more round in contour proximally. Rectal examination aids little to differentiate pysosalpinx from parametritic exudate as distally in pysosalpinx is the location of the chief exudate. If the tumor be bilateral it speaks, of course, in favor of oviducal disease.

Haematoma so simulates cellutitic exudates that it is difficult to differentiate from pysosalpinx. The haematoma, the result of rupture of a large vein or extra-peritoneal rupture of an oviducal pregnancy increases in the parametritum in the direction of the least resistance exactly as does the parametritic exudate. The seat of haematoma is that part of the subserosum pelvicum located between the blades of the ligamentum latum where is situated the plexus pampiniformis. It will extend from the subserous tissue of one side to that of the other, dissecting its path between rectum, vagina and uterus. Haematoma is more round from its methods of increase (dissecting), while exudates are more flat and diffuse from inflammatory increase. Exudates begin with chill, acute fever and rapid pulse. Haematoma begins suddenly with no fever, often with fainting, blanched white skin, severe pain, and arises especially at menstrual times, oviducal pregnancy, or from trauma.

Rectal carcinoma is often difficult to differentiate from parametrium exudate. The rectal mucosa in both carcinoma and parametritic exudate is immovable. If the rectal carcinoma sends out infective, inflammatory processes, as it frequently does, into the parametrium, only time will decide the palpation per rectum and per vagina.

Peri-cæcal exudates are difficult to differentiate from parametritic exudates and many times I have failed. Operation itself will not always decide, for an exudate may be found intra-pelvic (right side) and para-coecal at the same time. The point to decide is which arose first for absorption of the middle segment of the exudate has left a parametritic exudate and a paracoecal exudate.

In several hundred autopsies I have found approximately para-coecal exudates in 60 per cent. of females and 75 per cent. of males. Hence, the frequency of para-coecal exudates is much more than that of para-metritic exudates.

If the exudate be para-coecal it will lie chiefly in the right iliac fossa. If the exudate be lateral, pelvic, cellulitic it will mainly lie in the lateral pelvic cellular tissue. Para-coecal exudates are chiefly intra-peritoneal exudates, project toward the abdominal cavity, and mainly surround that segment of the intestine (caecum, appendix or distal ilium) which lies within traumatic action, the psoas muscle. All exudates in the right iliac fossa are not from appendicitis. * The chief exudates arise from the trauma of the psoas muscle, tuberculosis, constipation, relapsing attacks in the right iliac fossa points to appendicitis. A majority of cases in women diagnosed by general physicians as chronic appendicitis turn out to be right side, parametritic exudates and oviducal disease (typical relapsing appendicitis is not here referred to).

The differential diagnosis between an intra-peritoneal (peritoneal) exudate and a parametritic exudate (pelvic cellulitis) or extra-peritoneal exudate offers in certain cases almost insurmountable difficulties. The difficulty lies in the fact that frequently both exist together. In careful dissection of some sixty female pelves I found that parametritic existed with more or less pelvic peritonitis, in something like 20 per cent. of the subjects. The position of the tumor is important, for lateral lying tumors are more likely parametritic, while tumors posterior and median to the uterus are more liable to be peritoneal exudates.

Parametritic exudates develop more distally while peritoneal more proximally to the uterus. On the position of the exudate depends the mobility of the uterus, extensive lateral position of the uterus indicates a parametritic exudate. The distal surface of parametritic exudates is irregular in contour. Important knowledge is gained from rectal examinations. Parametritic exudates intimately surround almost the entire rectum with a solid wall, with immobile rectal mucosa. Peritoneal exudates generally approach the rectum on one side, limited and the rectal mucosa is more mobile. Parametritic exudates become hard in consistence sooner than peritoneal exudates which may remain quite soft for a long time.

The differentiation between parametritic bands and perimetritic bands is, chiefly, in position. Perimetritic bands are in the neighborhood of the oviducts fundus and body and are easily

broken, delicate construction and fit the body. The parametritic bands are in proximity of the cervix, hard in structure and unyielding and fix the cervix.

(b) Parametritis atrophicans lateral pelvic cellulitis (Freund) or retracting parametritis cellulitis consist in chronic inflammation of the pelvic subserosum local or general. The process consists in a thickening and shrinking of the pelvic cellular tissue. Its chief location is in the posterior parametrium and especially in the sacro-uterine ligament. It is manifest in the posterior parametritis of B. Schultze. It has a slight tendency to become diffuse. The result of contracting posterior parametritis is change of position of the uterus. The contracting and thickening sacro-uterine ligaments gradually drew the cervix posteriorly, while at the same time the body and fundus of the uterus is forced anteriorly. If only one of the sacro-uterine ligaments are shortened and thickened laterotorsion of the uterus will occur. In certain rare cases the horizontal layers of the parametrium are thickened and shrunken. The disease is characteristic in fixing rigidly the cervix, while the body and fundus may possess considerable mobility. It is easily diagnosed per rectum by the stiff, rigid, sacro-uterine ligaments and stiff posterior vaginal fornix.

I am indebted for valuable suggestions to Dr. George Winter, author of "Diagnosis in Gynecology."

REVIEW OF PATHOLOGICAL WORK AT CITY HOSPITAL FOR THE PAST SIX MONTHS WITH PRESENTATION OF SPECIMENS.

BY

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This report will cover briefly, some of the more interesting lesions revealed at autopsies, during the past six months at the City Hospital.

At this institution senile changes are often met with. Hardening of the arteries is a concomitant of old age, hand in hand with this hardening there is a corresponding loss of elasticity and motion. Just where the line between a normal senile sclerosis and a pathologic sclerosis of the arteries, is to be drawn, is difficult to determine; probably the etiology should settle this ques-

tion, heredity being the factor in senile sclerosis, alcohol, rheumatism, syphilis, etc., the factors in pathologic sclerosis. My excuse for presenting this particular specimen is that the hardening has progressed to such a degree that it naturally commands interest. It was removed from a man 78 years old, who died of pneumonia; the aortic valves are not involved in this sclerosis, and the heart is but slightly hypertrophied, weighing 310 gms. All the accessible arteries were more or less thickened. The kidneys are but slightly altered from normal, being a little smaller (135 gms).

Pneumonic consolidation of the apex of the lungs is not so common but that I may call attention to the fact that it was encountered at two autopsies. In both cases the right side was the one involved; in the one the entire upper lobe was involved and caused death, in the other only part of the lobe was involved, death probably resulting from a heart lesion.

Of the thirty-five autopsies gall stones were found in four—in one bladder, one; in another twenty-four—the total number found was fifty. Not in any of these four cases was there any history of gall stones, nor any symptoms of them, and were only discovered during the routine examination of the gall bladder. In most series of autopsies unsuspected gall stones were discovered in about 5 per cent.; you see in this series it is between eleven and twelve per cent.

Perhaps the most interesting lesion, from both the clinical and pathologic standpoint, was a stricture of the oesophagus, due to a neoplasm. A mediastinal tumor had been diagnosed; however, the patient could take, and for some time retain considerable quantities of liquid food, which finally was ejected. This fact in connection with progressive emaciation, led to a suspicion of carcinoma of the stomach, involving the pylorus. Death resulted from starvation. The autopsy disclosed this tumor of the oesophagus about opposite Ludwig's angle. The lumen through the tumor is greatly diminished. The tumor itself is symmetrical and concentric with regard to the oesophagus. There are no areas of ulceration, no metastases or enlargement of adjacent lymphatic glands. The microscopic examination shows it to be a carcinoma, of the scirrhous type, which seemed to have had its origin in the submucous layer of the oesophagus, the muscular layer not being involved. The groups of cancer cells are quite widely separated by a well developed stroma. Above the tumor the oesophagus is observed to be greatly dilated (now considerably retracted by the

preserving fluid). How much food passed the stricture and how much remained in the dilated portion of the oesophagus above, are questions of surmise. This was removed from a man 59 years old, who five months previously, first detected difficulty in swallowing.

It may be of interest to the anatomist and biologist to note that a cervical rib, previously diagnosed, was demonstrated to be present in a man dead of tuberculosis. It extended from the seventh cervical vertebra to the upper part of the posterior edge of the clavicle, at the junction of the inner and middle thirds. The exact attachment to the vertebra could not be determined, though it was movable and in all probability more than a prolongation of the transverse process of the seventh cervical vertebra; whether it articulated with the body of the vertebra and had a tubercle articulating with the transverse process was not determined.

The gynecologist may be interested in the finding of a small cystic ovary which was bound down in Douglas's cul-de-sac. The surrounding adhesions involved the right ureter so as to produce obstruction, with dilation, and cystic degeneration of the kidney. The interesting feature was that the patient gave no history or symptoms which would suggest such a condition.

This case naturally leads me to the fact that often well marked lesions may exist without producing symptoms or physical signs, death from some intercurrent disease, bringing the post mortem illumination; for example, I should say, that in a majority of the autopsies adhesions of the pericardium to the left pleura were discovered, usually no physical signs or history of pleurisy having been elicited. The cause of such a pleurisy, it seems to me, might be explained by a traumatic action of the heart.

In connection with this subject of lesions without symptoms or physical signs, this stomach may not be without interest. The man from whom it was removed had for years used alcohol more or less to excess, which fact may be suggestive of the etiology. The condition was unsuspected until encountered at autopsy. Microscopic examination of the tumors disclose the fibro-vascular structure characteristic of a papilloma.

IS IT JUSTIFIABLE TO ENUCLEATE DURING THE
ACUTE STAGE OF PANOPHTHALMITIS?

BY

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Case I. Mr. S. A., aged 22, laborer, came under my care at the Cleveland General Hospital on November 20th, 1899. While engaged in breaking old iron a small piece struck him in the right eye, producing a wound but not remaining in the eye. When I saw him about six hours after the accident, the following condition was present: On the temporal side of the eye could be seen a clear cut wound involving the corneo-scleral junction and extending about 5 mm. into the cornea and 5 mm. into the sclerotic. The pupil was partly dilated, due to the use of atropine, but would not dilate completely. The iris was caught in the wound, causing the pupil to be distorted. The anterior chamber was shallow, tension -2, some subconjunctival ecchymosis, considerable circum-corneal congestion, lids not damaged. The eye was cleansed with 1-5000 bichloride solution, Atrophine drops used and cold compresses applied.

On 21st there was considerable ciliary and conjunctival congestion and also oedema of the conjunctiva. Patient complained of pain in the eye and head. Temperature 102 degrees. The bowels were thoroughly opened by calomel and magnesium sulphate. Morphine was given to allay pain.

On 22d symptoms of panophthalmitis were present. There was protrusion of the eye, oedema of the lids, increase of tension, pus in the anterior chamber and amaurotic cat's-eye condition of the pupil. Temperature 102.4 degrees. Enucleation was advised, but consent of friends could not be obtained.

On 26th the symptoms above mentioned were more aggravated and, as I urged enucleation, Dr. D. B. Smith was asked to see the case in consultation. Dr. Smith advised enucleation, and the friends finally gave their consent.

As the wound was in the anterior part of the eye, and partially closed, removal of the eye was done without any of the pus escaping. Before enucleation the eyeball was well flushed with 1-3000 bichloride solution, as was also the orbital cavity after removal of the eye. The temperature became normal in 12 hours



This cut illustrates Case I and is from a photograph taken
the day before operation.

and the patient made a rapid and uninterrupted recovery. The accompanying cut shows the condition of the eye the day before operation.

Case II. Mr. H. P., aged 35, laborer, was injured by a powder explosion while blasting rock on February 3d, 1900. On February 4th I saw him for the first time at the Cleveland General Hospital. He was severely burned on the face, hands and arms. The left side of face was the worst. His face and eyelids were so swollen that the left eye could not be seen. The right cornea was not injured, but some powder grains were embedded in the sclera. A few drops of a 1-2000 formalin solution was placed between the lids and compresses from a similar solution were applied over the eyes. On the 6th the swelling had so much subsided that the left eye could be seen. The cornea showed extensive injury in the upper nasal quadrant with commencing suppuration of the cornea. The eye was cleansed with the formalin solution and internal medication was given. In spite of this treatment the condition of the eye went from bad to worse, and by the 12th a condition of panophthalmitis had set in. I advised and performed enucleation. The patient had no untoward symptoms following the operation.

A pathological examination of the eye was made by Dr. Robert G. Schnee, of which the following is a condensed report: "The cornea was ruptured. On section, evidences of an acute inflammation were seen in all the coats, being least marked in the sclerotic. In making a gross examination with a dissecting-scope a few small, hard granules were found, which proved to be bits of gravel and rock."

There is a general opinion among the profession that it is somewhat dangerous to enucleate an eye during the acute stage of panophthalmitis on account of the liability to subsequent meningitis and death. That there is such a general opinion is not surprising, as the most experienced ophthalmologists are divided on this question. Probably, whatever risk may have attended enucleation in those cases has been due to the common practice of subsequently packing the orbit with sponge, lint, or absorbent cotton pads to check hemorrhage; and then leaving these in position, under a pressure bandage, for twelve or twenty-four hours or even longer.

To quote some of the authorities, we find the following:

Swanzy, of Dublin, in his book, "Diseases of the Eye," says: "I agree with those who think that enucleation of the eyeball

should not be undertaken during purulent choroiditis (panophthalmitis) in the acute stage, as it is liable to lead to purulent meningitis and death; but there are surgeons who do not recognize any such danger, and who practice enucleation in this condition."

Fuchs, of Vienna, in his work, "Text-Book of Ophthalmology," gives his opinion in the following words: "Enucleation is to be rejected, for, devoid of danger as it is under other circumstances, in panophthalmitis it sometimes results in purulent meningitis, with a fatal issue." He concludes the paragraph with this remark: "It must, however, be noted that some cases have been known in which fatal meningitis has succeeded a panophthalmitis without any operative interference."

Knapp, of New York, in "System of Diseases of the Eye," states: "I myself have removed a number of panophthalmitic eyes without bad consequences in any, yet I perform the operation only for particular reasons,—for instance, great debility, advanced age, mental derangement, etc., of the patient, where a rapid and painless recovery is important."

Jackson, of Denver, in his work, "A Manual of the Diagnosis and Treatment of the Diseases of the Eye," says, with regard to the treatment of this condition: "This is to be directed mostly to relieving pain and shortening the course of the disease. If the patient will consent to it, these indications will be most promptly and effectively met by at once enucleating the eyeball. Enucleation during panophthalmitis has been credited with causing meningitis and death. Numerous cases have been reported in which death by meningitis followed the enucleation of the suppurating eyeballs. But in some of these cases it is evident that the meningitis had begun before the enucleation and in others it is probable that it would have occurred without enucleation, as it has done sometimes when enucleation was not practiced. The author believes that the patient's risk of meningitis is not increased by enucleation if the operation is a surgically clean one and sufficient bleeding is allowed, and perfectly free drainage of the orbital tissue is secured."

The most extensive argument on the subject is by C. Devereux Marshall, late curator of the Royal London Ophthalmic Hospital, London, Eng. This is contained in the Royal London Ophthalmic Hospital Reports, Vol. XIV., part 2. Mr. Marshall reports five cases of panophthalmitis in which enucleation was performed and in each case death followed the operation. These fatal cases were reported so that the conditions found post-

mortem could be detailed. In Case I. death followed in 48 hours after operation, in Case II. in 42 hours, in Cases III. and IV. in 58 hours, and in Case V. in 96 hours. Autopsies were made in each case. The most noticeable condition among the pathological changes found after death was the very strong adhesions between the membranes and the bone, and also between the membranes and the brain. Mr. Marshall states that he considers it impossible that the marked softening and extensive sub-arachnoid suppuration noted could all have come on during the short time the patients lived after the first signs of meningitis. It must have taken days at least to develop. This was also the opinion of Professor Victor Horsley who examined the brains with Mr. Marshall. The argument here is to show that meningitis must have been present before operation. Furthermore, it is a well known fact that meningitis may be present without acute symptoms and also that after well-marked signs of the disease have existed, they may subside altogether for a time, and then again rapidly develop shortly before death.

In all cases of panophthalmitis in which the writer has done enucleation the results have been equally as good as those reported and those results, together with equally good results by others, confirm his belief in the advisability of early enucleation during the acute stage of panophthalmitis.

In concluding his paper, Mr. Marshall summarizes as follows:

"1. Meningitis may be present for a certain time without there being sufficient symptoms to enable one to diagnose the disease.

"2. Meningitis has been known to follow other operations besides the excision of suppurating eyes, and cases are also recorded in which the excision of an eye which was not suppurating has been followed by death from meningitis.

"3. The changes seen in many cases indicate that the disease is of older standing than the symptoms would appear to indicate.

"4. Infection may occur at any time from an eye which is suppurating, and the longer the pus is shut up in the eye the greater is the risk, and the greater will be the absorption of the products of suppuration.

"5. There are two ways in which meningitis may arise: (a) By direct extension along the optic nerve and structures passing through the sphenoidal fissure; (b) by infective material being carried along the vessels.

"6. The sooner the pus is gotten rid of the better, and if it is thought undesirable to excise the eye it should be at once opened, the contents completely removed, the sclerotic thoroughly scrubbed out, and both it and the surrounding parts rendered aseptic. Owing to there being no clear cornea to injure, a far stronger antiseptic may be employed than would be possible if a seeing eye were present.

"7. As the products of putrefaction may have soaked into the sclerotic and have infected the surrounding parts, it is far better to remove it; good drainage is then insured, and every piece of useless and suppurating tissue is removed."

Abstracts and Extracts.

THE ADVANTAGES AND DISADVANTAGES OF DRAINAGE AFTER ABDOMINAL OPERATIONS.*

In a paper read at the St. Paul meeting of the American Medical Association, 1901, before the Section on Diseases of Women, Robb, of Cleveland, shows how materially our ideas have changed with respect to the advantages and disadvantages of the drainage-tube after abdominal sections. In a paper published in 1890 he had summarized the indications for drainage as follows:

(1) To provide a means of escape for the serous oozing which follows the separation of broad adherent surfaces.

(2) To guard against septic peritonitis from retained pus from the tube, ovary, or other viscus.

(3) To remove fluid in cases of persistent capillary hemorrhage.

(4) To provide against hemorrhage in cases of hysterectomy when the pedicle is dropped.

(5) To drain the peritoneal cavity and starve out the disease in cases of chronic or tuberculous peritonitis.

But from supplementary work done in 1891 he became convinced that the drainage tube favors rather than prevents infection. He quotes the objections to the drainage-tube formulated by Prof. Welch of the Johns Hopkins University about that time.

"(1) They tend to remove bacteria which may have gotten into a wound from the bactericidal influence of the tissues and animal juices. (2) Bacteria may travel by continuous growth or

*Abstract of paper prepared for the Section on Obstetrics and Diseases of Women American Medical Association.

in other ways down the sides of a drainage-tube, and so penetrate into a wound which they otherwise would not enter. We have repeatedly been able to demonstrate this mode of entrance into a wound of the white staphylococcus found so commonly in the epidermis. The danger of leaving any part of the drainage-tube exposed to the air is too evident to require mention. (3) The change of dressings necessitated by the presence of drainage-tubes increases in proportion to its frequency the chances of accidental infection. (4) The drainage-tube keeps asunder tissues which might otherwise immediately unite. (5) Its presence as a foreign body is an irritant and increases exudation. (6) The withdrawal of tubes left for any considerable time in wounds breaks up forming granulations—a circumstance which prolongs the process of repair and opens the way for infection. Granulation tissue is an obstacle to the invasion of pathogenic bacteria from the surface, as has been proven by experiment. (7) After the removal of the tube there is left a track prone to suppurate and often slow in healing.”

Moreover, its use favors the occurrence of various post-operative complications of which Clark mentions (1) obstruction of the bowel; (2) fæcal fistulæ; (3) vesical complications; (4) post-operative herniæ.

In the majority of cases of pyosalpinx the pus organisms are dead at the time of operation, and besides the peritoneum is capable in any case of taking care of a certain amount of infective material. Again, Clark has well shown that the drainage-tube or gauze often acts more as a plug than as a drain.

Robb has for the last seven years made it a rule to close the abdomen, and in a series of 222 consecutive cases with one death, has employed drainage only once. If, however, infection occurs the abdomen can be reopened without danger and well washed out. For the prevention of infection or the removal of infective material without the employment of drainage, Robb insists upon the following points:

- (1) A thoroughly aseptic technique.
- (2) The controlling of all hemorrhage and oozing as far as possible.
- (3) Careful manipulation so that all unnecessary bruising of the tissues is avoided.
- (4) A perfect toilette of the peritoneal cavity.
- (5) The removal as far as possible of infectious foci.
- (6) The use of irrigations with salt solution.

(7) If necessary the reopening and thorough cleansing of the cavity.

(8) Proper after-care of the patient.—*The Journal of the American Medical Association*.

* * *

THE ANODYNE TREATMENT OF ACUTE PERITONITIS.

McCaffrey ("The Etiology, Pathology and Treatment of Acute Peritonitis") observed that the most pronounced indication for treatment in peritonitis is that for the relief of pain. Blisters and counter-irritation, the older resorts are practically useless. Hot-water bags and poultices are far superior, but the relief they afford is only temporary. In some cases the ice bag is more grateful than hot applications. But whether hot or cold is employed, it should be relied upon only until other lines of treatment can be instituted. Papine should be given in teaspoonful doses every hour, and the doses repeated frequently enough to afford the desired results. Relief from pain, short of narcosis, should be sought, and this is generally easily obtained by proper dosage. Papine does not produce nausea, but rather prevents this symptom. In the event of the development of more or less prostration, a proper stimulant, such as as strychnine or nitro-glycerine, should be judiciously employed.—*Medical News*.

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Hunter Robb, of Cleveland, in a paper entitled "Pus in Abdominal Cases," read before the American Gynecological Society at Chicago, May 30th, 1901, gives an analysis of 72 unselected operations for suppurative conditions of the pelvis, with two deaths. From his experience he makes the following deductions: Pus met with at the time of operation in many of these cases is not virulent, so that care must always be taken that no infective material is introduced by the operator. Strenuous asepsis before, during and after the operation must, therefore, be insisted upon. Streptococcus cases do not always show macroscopic evidences of pus at the time of operation. An examination of coverslips often reveal the true nature of the case. As a general rule it is a wise precaution for the operator to perform only one abdominal section on the same day.

Shock is to be considered in cases of pelvic peritonitis, and where it is possible operation should be delayed until the more acute symptoms have passed off. If, however, no improvement takes place in a few hours we are compelled to risk an immediate operation. Drainage from the abdominal incision is rarely ad-

visible. More often drainage through the vagina is safer and more effectual, but where the purulent material can be swabbed out satisfactorily even this may be unnecessary. Where the wound has been closed, if untoward symptoms arise, the abdomen may be reopened and the cavity irrigated with salt solution. It is always advisable to protect the intestines from any pus which may escape during the manipulations. This can be effected by placing large gauze sponges high up in the flanks on either side, the patient being kept in the horizontal position until the masses have been enucleated. Careful mopping out of the abdominal cavity and subsequent irrigation is advisable in all these cases. A certain amount of salt solution left in the abdominal cavity not only dilutes any poison which may remain, but also acts as a healthy general stimulant.

Robb's paper end with a detailed consideration of the two fatal cases.—*American Journal of Obstetrics and Diseases of Women.*

* * *

It is a curious characteristic of human nature, or of a great deal of human nature, that people who would grudge paying a cent to a regular medical practitioner will cheerfully pay a great deal of money to an irregular medical practitioner. Go where you will and you will find the quack prosperous. His rooms are full of patients, and his patients are full of faith. Men and women will buy wondrous remedies from travelling mountebanks who do not disdain to sing a comic song on the wagon from which they peddle their nostrums. Natural bonesetters, and long-haired "Indian doctors," and botanic doctors ignorant of botany, and faith healers of many kinds, abound; and the trade of most of them is good. The world likes to be healthy, but it loves to be humbugged. If a thousandth part of the blind, unhesitating faith that cleaves so readily to incompetent, and often illiterate, practitioners of fantastic means of healing were bestowed upon religion, there would be no complaints that the churches are not filled. But often those who are full enough of doubts of the supernatural so far as it relates to their souls are quick to believe in an almost or altogether supernatural gift of quack salves to cure the body. Legislation can do but little if anything to interfere with the gains of the medical pretenders or of the professors of visionary and semi-religious medical "science." You cannot legislate away a state of mind; and the state of mind of thousands, perhaps millions of persons, is one of crass credulity

in humbug. Their delusions and illusions can be removed only by experience and a wider knowledge. They take their own lives and the lives of their families in their hands when they neglect the methods and the agents of modern medicine and surgery and resort to the moonshine of Christian "science," or to any other crank system, or to any individual quack. But you cannot prevent people from killing themselves if they have the will; and you will only stimulate faith in quackery by giving it a chance to yell "Persecution!" A private arrangement between patient and "healer" will nullify any provision of law forbidding the "healer" to heal for a consideration. A gift can take the place of a fee; and "gratuitous" treatment can be acknowledged with a gratuity. The best way to deal with a delusion is to let it alone. Common sense must win in the end.—*New York Sun*.

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It is stated of Ricord, the distinguished French specialist, and author of a treatise on venereal disease, that, at a dinner in Paris, when the viands had been removed, and the speech-making time arrived, he, among others, was asked by the toastmaster to state his view of the punishments of hell that would be meted out to the unfortunate sinners who should be sent below. His reply was brief and to the point. He said that "no greater punishment could be meted out to him than to be compelled to review the procession and to hear the accusations of those he had failed to permanently cure of gonorrhoea." Our consciences, as well as our treatment, need revision in regard to the dismissal of gonorrhoeal patients as cured so absolutely and permanently as to make marriage safe beyond the possibility of the contamination of the innocent wife. How long after the gonococcus ceases to be found by the microscopist in the urethral secretions or discharges can we safely give our professional sanction to matrimony? This is one of the burning questions of the day, and should be considered with the greatest care and conscientiousness. Dr. Joseph Price says there are more and better reasons for locking up in jail a man with gonorrhoea than there is to incarcerate a common murderer. In one case there is only one victim and that victim is dead; in the other there may be a dozen or more, doomed possibly to suffering and sorrow during the remainder of their miserable lives.

In the search-light glare and publicity of the scientific attainments of the twentieth century let us try at least to lift this *opprobrium medicorum* from the shoulders of the regular medical

profession, and so treat this disease that the sad complications which it has been the object of this paper to portray will no longer occur and its uncured victims will have no cause in the hereafter to rise up and curse our memory.

If the ophthalmologists can reduce, as they now claim they can, 25 per cent. of the blindness of the world down to a fraction of 1 per cent. by their radical preventive treatment, why can't we, by equally careful, thorough and radical preventive treatment, actually prevent the occurrence of the pelvic complications of gonorrhoea in women? I most earnestly hope we can and will in the not distant future.—*Joseph Taber Johnson, M. D.*

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We hear much about the prophylactic treatment of disease, but here, where prophylaxis and early recognition should be employed, we seldom see it mentioned, that is the field of preventive medicine needs yet to be developed in this direction, so far as the early application of remedies applied to the treatment and arrest of malignant conditions is concerned. Malignant disease is not without the sphere of prevention. Let me illustrate, particularly in the cases of gall-bladder irritation, from gall stones, or otherwise. It is now a well established fact that pain, traumatism, inflammations and adhesions, from repeated attacks of biliary colic, develop carcinoma somewhere along the line of the tissues implicated, and that in nearly eighty per cent. of long-continued attacks, in which an operation is finally done, malignancy is discovered, in connection with the condition of gall stones. Another very marked characteristic condition is that of lacerations and injuries of the cervix. We have sometimes been surprised, and in former years it was thought exceedingly rare, for a young married woman to present a case of cancer of the uterus. The fact is, from the standpoint of etiology and pathology, at the present time, that the lacerated cervix, neglected, not attended to as it should have been, is not an infrequent cause of the epithelioma or form of cancer from which she is suffering. How many, many cases we see of neglected moles or growths about the surface of the body that result in true skin cancer from repeated irritation, and when not treated properly become a source of glandular infiltration, involving the more serious structures, through the lymphatic system, and at last we have all the marked conditions of serious constitutional malignancy, when at one time it was strictly local, and required but prompt, preventive treatment to arrest its future development. Especially should

we be cautious in the care of long-neglected ulcers, such as result from gunshot wounds, and similar traumatisms. Here we have conditions that are sometimes quite entirely overlooked, and the hand, foot, or upper or lower extremity is sacrificed because of the belief that the original lesion was non-malignant and would yield to ordinary treatment.

We continue to delude ourselves, and when too late find that the growth which was so benign, and which was yielding so nicely to treatment, has grown by leaps and bounds, and is far beyond any chance of relief. We too often "lock the stable door after the horse has been stolen."

It seems to me that the great reasons for the early recognition of malignant growths may be stated thus:

1. The patient not having been debilitated by a long and tedious strain upon the system, can the better withstand the risk of shock and hemorrhage of an operation.

2. The greater the probability of a complete removal of the malignant growth, by an early operation, and so the less liability of its return.

3. The growth being small the incision will correspond, and so the avoidance of unsightly scars.

It is by no means an easy task to recognize a malignant growth in its early stages, but if we go upon the assumption that all growths are malignant until proven otherwise we will seldom miss our diagnosis. Benign tumors have a tendency to turn into malignancy upon injury, etc., owing to an impoverished state of the system, and it is well in all growths, where we have the history of an injury, to be suspicious that we have a malignant growth to deal with. All benign growths of rapid development cannot be extirpated too soon. Then again the history of malignant growth in the family should make us consider carefully in regard to the case which we are called upon to examine. It is an old saying that "a stitch in time saves nine," and nowhere is this better illustrated than in the subject under consideration.—*Edgar A. Vander Veer, M. D.*

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The unwritten law of the medical profession, that its members should keep themselves in the background, has been the greatest stumbling-block to professional advancement. The medical profession to-day has no particular social, commercial, financial, or political importance. Why? Simply because of the bigotry and intolerance of the profession itself. I hold that every

physician or surgeon who becomes important in the public eye, either socially, politically, or in commercial enterprises, is a powerful factor in the advancement of the best interests of the profession. The profession is poor; the profession has no particular "pull" in either commercial or political lines, and yet we wonder why it is impossible to get legislation against quackery and various forms of medical faddism. As a matter of fact, the doctor, as such, is a nonentity in the community. The medical man who makes a political speech, or becomes identified with a successful commercial venture, or is spoken of frequently and in a complimentary way by the newspapers, immediately becomes a target for the abuse and invective of the profession at large. This condition of affairs must change. I hold that it is the duty of every man in the profession, not only to himself but to the profession, to bring himself before the public, as a citizen and a representative of the profession, where it can be done respectably, at every possible opportunity. The doctor should take interest in politics. He should be a man of affairs. If he accumulates wealth, the profession should not consider it a high crime and misdemeanor, but a distinct advantage to the profession at large. By proceeding along these lines the time will come when we, as a profession, can command legislation, instead of being compelled to beg it like a lot of mendicants as we are at the present time. The quack has votes; the quack has money; the quack has pull and newspaper influence, and we have nothing; not even the gratitude of the people to whose welfare we devote the best years of our lives.

In speaking in favor of newspaper representation of medical men, I do not mean that they should publish their operations or premature accounts of alleged wonderful discoveries in the papers. The example set by certain eastern surgeons, men of the highest prominence, in inviting reporters or permitting reporters to be at their operative clinics, cannot be too strongly condemned. I believe, however, that signed articles of a quasi-scientific character by medical men, from which the public can derive intelligent information on scientific subjects—and particularly matters medical—first hand, should be considered ethical by the profession. There is only one way to down quackery, and that is by educating the people to an intelligent understanding of what we are and what we are doing. The public is bound to make comparisons, and if it has any data upon which to base such comparisons, the quack will have much less advantage in the competition than he

now possesses. We expect too much of the public. We expect it to draw hard and fast lines between quackery and legitimate medicine, while the quack is stating his case and the medical man is retiring behind the bulwark of his professional ethics and dignity.—*G. Frank Lydston, M. D.*

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The treatment of traumatic ulceration of the rectum is very simple, but the treatment of dysenteric, tubercular, and syphilitic ulcers is most difficult. You take a traumatic ulceration; all that is necessary is to keep the ulcer clean and stimulate it with the balsam of Peru, nitrate of silver, krameria, calomel, or other astringent remedies. If a man comes to you with a deep-seated ulceration, which refuses to heal by local applications, the thing to do is to dilate the sphincter muscle and then try the milder astringent solutions; if these fail, cauterize the surface with nitric acid or stick silver; then if he does not get well you will have to resort to operative procedures, curettage, incision, excision and colostomy, when everything else fails. You need not be so afraid to make a colostomy, as it is not so dreadful as many writers would have you believe; they tell you that people go around with feces discharging all day long. I have made one hundred colostomies, and I have seen nothing of this sort. It depends largely on the way in which the opening is made, and also upon the *education* of the individual; more really depends upon the education than the operation. These patients with colostomies should be taught to have the bowels move in the morning and again at night. Instruct them to thoroughly empty the colon, for if you get only an ounce out, the rest will dribble at short intervals. The patient will get so he can discharge the feces without trouble, and have a certain control over the artificial anus. Another advantage that we have now is that formerly, when a man had a colostomy, he had it for life; now we can make a temporary or a permanent colostomy; the latter can be closed, if we want to, but it is more difficult to close than the temporary. Temporary colostomy you would make for ulceration, membranous colitis, and afterwards restore the natural channel. After a patient has had a colostomy for one or two years we are told the rectum atrophies. That is not true. I have closed one five or six years after, and another three years afterwards, and these patients had perfectly natural stools. The difference between making a permanent and a temporary colostomy is this: In making a permanent colostomy you want to be sure that no fecal matter gets into the lower

rectum, by making a spur, for if it does you defeat the object of the operation. In the permanent colostomy you bring the gut well up out of the abdomen; the distance depends upon the length of the mesentery. If very short, you need only bring it out a very short distance, while if it is long bring it out as far as six or eight inches, and after it becomes adherent to the incision you cut it off; therefore, if you wish to avoid a prolapse, leave but little mesentery. On the other hand, when you make a temporary colostomy, you simply bring the bowel up and make a slit in it. When it is desirable to close an artificial anus, after a permanent colostomy, an end-to-end anastomosis, by sutures or a Murphy button, is necessary. In the temporary colostomy you have only to freshen the edges, and bring them together with a few sutures.—*Samuel G. Gaur, M. D.*

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Is there any tinge of selfishness in the aims of medical writers? I presume there are men in the profession who are possessed of sufficient egotism to believe that they are conferring a distinct benefit on humanity by all their scientific writings, and who, with this idea in mind, lose sight of the possible value of their literary work to themselves. I believe, however, that aside from the limited few of these ego-manics, the average medical writer, if you can involve him in a heart to heart talk, will confess that he has written primarily for No. 1. Most medical writers would devote their attention to something more profitable than literature if they felt that their efforts resulted only in self-improvement and good to humanity at large. The man who writes articles and publishes reprints is engaged in advertising. He is, however, advertising to his competitors, which is the longest possible road to the consumer and therefore tolerated by the profession. There are those in our profession, however, who are very impatient with the medical writer because of the implied attempt to advertise himself. This position is absurd. The value of literature to the reader is by no means determined by the object which the writer has in view. The man who writes to advertise himself is quite likely to give the reader his best effort, for in this field, as in every other, competition is keen. The man who throws a reprint into his waste basket simply because he thinks the author is using his reprints as a means of advertisement makes himself ridiculous. The author in the field of general literature often gets his reward—why then should not the medical writer? The medical writer must needs content himself with the advertisement of his work.

The "all hog" publisher will not recompense him. Just think of writing a text-book for a beggarly five per cent. royalty, or, as my publisher puts it, five per cent. royalty after the publisher has recouped himself, alterations and amendations to be charged up to the author. If some of us got as little fame out of our work as we do money out of our publishers, I fear the literary mill would not grind so assiduously.—*G. Frank Lydston, M. D.*

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Acute appendicitis, particularly when complicating ruptured tubal pregnancy on the right side offers a problem in diagnosis which will baffle most clinicians. A case of this kind was seen last year. A relation of the history of this case will be interesting, and at the same time will serve perhaps a useful lesson in treatment. This patient assumed the matrimonial role immediately after a menstrual epoch, the flow failed to appear at the end of the usual interval, two weeks later she fell in syncope; her physician made a presumptive diagnosis of tubal pregnancy and remained in attendance for several days, the patient gradually improved until she was able to go about the house, but suffered some pain in the right side. A few days later there was a recurrence of pain, accompanied by vomiting and considerable abdominal distention. It was at this time that I saw her and there was no hesitation in pronouncing the case one of tubal pregnancy with secondary rupture. Laparotomy confirmed the diagnosis of tubal pregnancy, but in addition she had acute appendicitis, from the symptoms of which she was suffering immediately prior to the operation; and in this instance it was the appendicitis that determined the propriety of an operation, although that fact was not recognized. It is important to note that the condition of the vermiform appendix would have been overlooked, had not especial search been made, and that portion of the viscera identified. Usually the tubal condition would have been considered sufficient to cause the symptoms which were present.—*George McNaughton, M. D.*

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The Incomes of Physicians.—Dr. A. K. Steele, in a paper read before the Chicago Medical Society, states that there is an unusual amount of ignorance both on the part of the public and of the profession regarding the incomes of physicians. Professional incomes are greatly overestimated. The income of the average physician in Chicago varies from \$1,500 to \$3,000 per annum; office specialists—eye and ear, nose and throat—average \$2,000 to \$6,000; consulting physicians, \$5,000 to \$15,000; six leading

physicians, \$15,000 to \$35,000; six leading surgeons, \$20,000 to \$60,000; six leading gynecologists, \$10,000 to \$20,000; six leading office specialists, \$10,000 to \$15,000; average surgeons, \$3,000 to \$10,000. The practitioners in Chicago whose income from practice exceeds \$30,000 per annum can be counted on the fingers of one hand, and probably not more than a score exceeds \$20,000 per annum. The two to three-dollar visit, the five to twenty-five-dollar consultation, the ten to thirty-dollar case of obstetrics, and the larger fees provided for operative work in the fee table do not insure large incomes for many in the profession. The expenses of a physician keep pace with his increasing business so that the opportunity for accumulating wealth is not easy.—*Courier of Medicine*.

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In the Chairman's address delivered before the section on Surgery and Anatomy at the last meeting of the American Medical Association, Dr. A. J. Ochsner again outlined his treatment of appendicitis based upon the anatomy and anatomical situation of the appendix and the pathology of the appendix. In considering the anatomical position he points out that the appendix is surrounded on all sides—with the exception of the median line—by relatively fixed tissues. Above is the caecum, to the right and front is the parietal peritoneum; behind the peritoneum covering the iliacus muscle, while toward the median line is an opening, supposed usually protected by the loops of the small intestine and the omentum. There is but one weak point in the anatomical position that needs protection, namely, in the direction of the median line where the small intestines must either fully protect or distribute the septic material generated in such a cavity by an appendicitis to all parts of the peritoneal cavity. It is plain then that a general infection of the peritoneal cavity must come from a disturbance of the small intestines and must be due to the peristaltic motion. Now peristalsis does not occur unless food or cathartics are introduced into the stomach, therefore to provide proof against this peristaltic motion the stomach should be free from food and from cathartic medicines. Food placed into the stomach is carried in a more or less undigested state to the ileo-coecal valve, which in appendicitis on account of the inflammatory reaction about it and not attempting to carry out a physiological rest resists the further discharge of food and recurrent peristalsis is set up, which carries the food back again to the stomach, from whence it is voided by vomiting or in order to prevent further irritation ought to be emptied by gas-

tric lavage. It may be necessary to perform this two or three times in order to remove remnants of food which may have regurgitated into the stomach from the small intestines by reason of returned peristalsis. All food, then, should be withheld in the treatment of this disease and the patient fed by appropriate pre-digested food by the rectum.

He calls attention to one class of patients in which there is a death rate so extremely high, where the appendix was gangrenous or perforated and already a beginning of general peritonitis, that where this line of treatment was carried out the appendix became walled off and the trouble localized. Of this he claims that there is a recovery of over 90 per cent. if this treatment is carried out where before this treatment death was the general outcome.

* * *

In a paper on the "Diagnosis of Typhoid Perforations," Dr. Mark A. Brown, of Cincinnati, calls attention to the following points: Perforation of the intestine occurs as a rule at the time of suppuration of the necrotic masses—usually at the latter part of the second, or the beginning of the third week. The first symptom to attract attention is an abdominal pain, sudden, very acute, and agonizing in its character, sometimes diffuse, sometimes localized to one particular point, usually located at the most frequency and greatest intensity in the right iliac region, but it may be present in almost any part of the abdomen. Together with this comes a sudden and very decided drop in the temperature, although this may be so transitory as to escape notice. The pulse becomes increased in frequency and decidedly weaker and does not assume the ordinary wiry character until actual peritonitis has begun.

Upon the opening of the bowel into the peritoneal cavity there is at first a more or less rapid outpouring of gas or fluid, causing almost immediately gaseous distension of the abdomen, pushing up of the diaphragm and considerable interference with respiratory movements. Occasionally when the distension is moderate and the pain of the perforation severe there is an interference with respiratory movement of the upper portion of the abdomen, with immobility in the lower portion, the line of demarcation being usually at the line of the umbilicus. The tympanic note over the liver is generally present, but not necessarily always. There is an increase in the number of white blood corpuscles. Pain is always present and it is only by the closest observation and study of the minute and sudden changes that the diagnosis can be reached in a sufficient time to allow of operative interference for a chance of success.

In writing of the toxicity of acetanilid Dr. Samuel E. Earp calls attention to the prevalent indiscriminate use of the coal tar products. He says the following:

Perhaps no other drug is used with the same freedom, so universally and indiscriminately, with little or no regard for the ultimate results. It is purchased for trivial ailments by persons who are entirely ignorant of its therapeutic action. No drug within my knowledge is so universally advertised as an analgesic. True, some catchy name is used to designate the mixture of which the chief component part is this agent. It is safe to assume that there are very few drug stores that do not have a "special," so-called, of their own make, to cure headache, dysmenorrhea, la grippe, etc., and these almost invariably contain acetanilid. Many pharmaceutical firms have several such compounds, and furthermore the traffic is so general and commonplace that the headache powder containing acetanilid can be purchased from the corner grocery or sundry store.

If it were a safe agent, it surely would be a boon to the lower classes who desire a cheap drug to relieve pain under certain pathological conditions. Will a knowledge of the drug warrant this conclusion? Briefly, note the effect of its administration. In large doses, depression of the heart-action, prostration, collapse, diminished alkalinity of the blood, subnormal temperature, destruction of red blood corpuscles, and imperfect oxidation. These are some of the untoward effects. Perhaps it may be said that those are the toxic manifestations and not the therapeutic action. Grant this to be true, but are we able to determine accurately where the former commences and the latter ends? Fifteen grains is considered a maximum dose, yet I have seen one-third this quantity produce alarming symptoms. Several authors advise that 3 grains each hour may be given with safety; I have seen patients follow this rule and reach the danger line before a quantity had been taken that would equal the maximum dose. I do not desire to convey the impression that I condemn the remedy when it is used judiciously; on the contrary, I have myself obtained good results from its use, but I do desire to emphasize the fact that extreme caution should be observed.

It is accepted that acetanilid is always contraindicated when the patient is in an enfeebled condition; but where there is vigor, strength, plenty of vitality, and where such a positive remedy as aconite could be given with impunity, this remedy is considered a safe one. Just such cases are the ones that occasionally show toxic

symptoms. For instance, at the outset of some acute infectious disease, or perhaps a supraorbital neuralgia, and too, at a time when the patient has not been confined to bed. Why these uncertainties? Is the therapeutic dose of today but the toxic dose of tomorrow?

* * *

In the President's address delivered before the Nebraska State Medical Society, Dr. H. N. McClanahan calls attention to some of the prevalent evils in medicine, and particularly to some of the prevalent evils of medical colleges. In speaking of osteopathy the doctor has the following to say:

Why is it that so many place themselves in the care of the osteopath or the Christian Scientists? Is the fault with the public, or with our profession or medical schools? This is certainly a proper question for consideration. If the fault be with our profession or with the methods of teaching, then, in self-defense and in justice to ourselves, is it not our duty to ascertain and correct it? I do not believe that people patronize quacks and irregular practitioners from choice. Is it not true that a majority of those who seek aid from these sources have been under the care of the family physician, or possibly of several members of the profession, and have drifted away because they failed to find the desired relief? There is a well-founded belief in the minds of the laity that the medical profession is narrow and exclusive, and that it is slow to adopt new methods. This belief is not confined to the ignorant, but prevails among the highly educated, as I think you will all concede. In the minds of the public, the physician is too generally looked upon as an individual who administers drugs and performs surgical operations; and if these methods of treatment fail to bring relief, they believe he has reached the limit of his capacity. This low conception of the function of the physician is unfortunate, but is not wholly the fault of the public. Any method of treatment, not immoral, that is of benefit to the sick is legitimate and should be within the reach of the members of our profession. We have a right to expect instruction, in our medical schools, upon all proper and legitimate methods of treatment. Permit me to briefly call your attention to certain methods of treatment that might be, with propriety and benefit, incorporated in the course of instruction.

My information is derived from a careful study of the catalogues and announcements of twenty-one medical colleges, in widely distributed parts of our country. In but one did I find the subject of massage even mentioned. Denuded of its sophistry, os-

teopathy is merely a system of massage, and not even the best at that; but it has taken a hold upon the public and receives the patronage to which, in many cases, we are rightfully entitled. It is not the fault of our patients, but of our medical schools that this sect has grown up in our midst. Shall we ignore the truth because it is hidden in quackery? Had we not better expose the quackery and appropriate the truths? In certain cases massage is an excellent method of treatment, and will sometimes accomplish that which no other mode of treatment can. Why is it not possible in our medical colleges to give a thorough and systematic course upon the indications for its use and the methods of application, so that physicians may recognize those cases where it is properly indicated and refer them to some one competent to apply the treatment, instead of having them go, as now, to incompetent and irregular practitioners? It is not a sufficient argument to say that the physician cannot become a masseur. With equal force it can be said that every physician cannot do an abdominal section; but that does not excuse the physician from recognizing the nature of the case and referring it for operation. As the demand for better nursing of the sick has developed the trained nurse, to the great benefit of our profession, so the demand for skilled mechanical treatment will develop the trained masseur. At present many of us fail to recognize the cases where this method of treatment is indicated. For example, a gentleman in Omaha, in the course of two years, passed under the care of seven regular physicians for habitual constipation. He received nothing but drug treatment, and consequently only temporary relief. In despair he went to an osteopath and was cured. Let us be just. The osteopath is the one who administered the proper treatment in this particular case, and as a result received the hearty thanks and continuous influence of this gentleman. Now, had these seven physicians, in their college course, received proper instruction upon the subject of massage, as they no doubt did upon other branches of medicine, do you believe they would have permitted this patient to have drifted along without instituting a rational method of treatment? On the other hand I know a lady who has a cystic ovary. She went to an osteopath for treatment. As a result of the first treatment, she was confined to her bed for three days; as a result of the second and last, she was seriously sick. Now it would not have been possible for a scientific physician, having knowledge of general medicine, to have recommended such ridiculous treatment in this particular case. This illustrates the truth that in medicine,

science without art is helpless, and art without scientific knowledge, leads to charlatanism. It seems to me, therefore, that, in this direction, teaching in our medical schools can be improved, and that for the profession at large, instead of fighting the osteopath by statutory laws, we could better vanquish them by appropriating their own weapon. When the educated physician understands the limitations and indications for this method of treatment, then can he demonstrate to the public that he is more capable than the osteopath, both in selecting the proper cases and in directing the treatment.

A New Fruit. There is every reason to suppose that before long a most delicious fruit, new to America, will dominate our markets; already a few specimens have found their way to the seaboard cities. This is the mangosteen—native to the Moluccas and extensively cultivated in Ceylon and Java, and latterly introduced to Jamaica and other parts of British West Indies. It is about the size of a small orange, spherical in form, and when the rind is removed a juicy pulp, “white and soluble as snow,” is revealed, possessing a most delicious flavor—something like a nectarine, with a dash of strawberry and pineapple combined. It promises, in a few years, to supersede the orange in popular favor, and attempts are already being made to introduce it into the Southern United States.—*Southern Clinic.*

The Late Dr. Skinner's Precautions Against Being Buried Alive. A remarkable will was placed on record with the surrogate of Erie county, at Buffalo, N. Y., on July 22d. It was the will of the late Dr. Winslow W. Skinner formerly a resident of New York. He had a horror of being buried alive, and in his will described three tests to which he wanted his body subjected before it was cremated. The first test was to watch for the occurrence and disappearance of rigor mortis. The second test was to make a transverse incision in the thickest part of the biceps brachialis. The will says: “If no blood flows from this incision, or if only a few drops of thick blackish blood ooze into the cut, it is probable that death has occurred. But if red blood appears in the wound there is doubt as to death having taken place.” The third test was to observe for decomposition or putrefaction of the body tissue. This was the surest, the will said, and was indicated by the appearance of greenish marks, spots, and streaks on the abdomen, and by the odor. Dr. Skinner directed that his body be cremated after the tests had demonstrated that he was dead.

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Editorial.

IS IT HONEST?

Scene I. Class room in medical school. Lecture. One-third of class either inattention, not taking notes, or slow of comprehension.

Scene II. Class room in medical school. Recitation. About one-third of class signally fail, most of them surreptitiously consulting their note books.

Scene III. Examination hall in medical school. Examination. Best students occupying front seats.

Scene IV. Offices of several members of faculty. One-third of class having failed to reach the minimum standard of scholarship are registering emphatic *kicks* at the gross injustice shown them, etc.

Scene V. Faculty meeting. Consideration of cases of hard-
est *kickers*, or *kickers with pulls*.

Scene VI. Registrar's office. Choicest kickers receive notice that faculty has violated the standard of the school and qualified them in the subject.

* * *

The above is not a comedy—its truth places it, rather, in the class of tragedies—a travesty upon the standards and the morals prevailing in some of our medical schools.

The faculty of a certain medical school recently took occasion to disregard the *marks* attained in one of the departments, and advanced several students notwithstanding their failure to meet the requirements.

We understand that such action is not unusual in this school, and that the practice is not uncommon in many others.

Among every fair minded physician such action must appear dishonest, to the State which has granted the charter to the school, to the public that is soon to become the unsuspecting victim of unqualified and ignorant "graduates," and to the students themselves who should be compelled to reach a standard which would, at least, assure them a fair promise of success in the world.

It should not necessarily be considered a disgrace for a student to fail at examination. Indeed he will often learn more by his failures in student life than by his successes. It may seem hard at the time, but the practice of medicine is not altogether a bed of roses, and a few hard knocks early in a career may be the means of saving many severer ones later on.

We believe that a medical faculty will best subserve and be true to the many interests of which it is the custodian, by maintaining a high standard of scholarship, from which absolutely no exceptions are made for personal or other reasons.

It is high time that the profession made an effort to purge itself of such practices as are here spoken of. It should insist that its members who occupy positions upon the faculties of our medical schools prove worthy of the trust imposed in them.

G. SEELEY SMITH.

THE CURABILITY OF GONORRHEA.

We publish in this issue two interesting papers on the subject of the Curability of Gonorrhea, by Prof. Neisser, of Breslau, the discoverer of the gonococcus, and Prof. E. C. Burnett, of St. Louis. Papers by Prof. Audry, of Toulouse, and Prof. Tomasoli, of Palermo, will appear in next issue. These papers are the replies sent by these gentlemen in answer to a series of questions propounded by a special committee of the American Medical Association to enquire as to the curability of gonococcal urethritis and whether the spread of the disease could be controlled by statute. The replies of these gentlemen are interesting as showing the views of men whose work along these lines entitle them to hold views. They are also interesting as showing the real seriousness of a disease which even at this time the medical profession as a whole is not given to regard with anything like the seriousness which its importance justifies.

In reading these papers over one is impressed with the painstaking treatment which all these authors regard as absolutely necessary to a cure. There is no simple three weeks' recipe, no laxity about their methods. They regard the disease as curable in the vast majority of cases, but in order to insure this cure the physician must take the utmost pains and treat the case with an assiduity which is required in but few other diseases. The unfortunate fact is that most of the cases are not treated with such careful assiduity and the result is that a very large proportion of those who contract the disease regard themselves as well and are too often regarded by the physician as well, when in fact they are virulently infectious. This condition of things on the part of so many men, young and old, is known to be the efficient cause of the larger proportion of sterility among women and of those inflammatory diseases of the pelvic organs that require surgical treatment, and too often the removal of ovaries and tubes. Moreover, this condition in the male is responsible for no small proportion of the cases of puerperal fever that cost the lives of so many women in childbirth. Unfortunately, there has been allowed to go abroad among the profession, and among the laity too, that the physician's carelessness is a common cause of puerperal fever. We believe that in 99 cases out of 100 the physician can be exonerated from all blame. Now and then a careless midwife may convey infection through lack of personal cleanliness, but we may safely say that the modern, educated physician will never do it, and these cases of puerperal infection are far

more often traceable to a septic husband than to any other single cause.

These papers also emphasize another fact which it is the duty of every physician to promulgate among his clientele. A man who has become infected with gonorrhea is not a marriageable man until, as the result of the careful treatment outlined and of the rigid tests necessary to determine the presence or absence of the gonococcus his genito-urinary tract is proven to be aseptic. The physician who certifies a man as fit to marry under any other conditions than those above outlined is certainly morally responsible for the physical misfortunes that are to befall the innocent bride, and an enlightened public sentiment will sometime in the future hold him criminally liable, for there are few diseases which do not promptly kill that occasion greater or more prolonged physical disability and suffering.

PRELIMINARY PROGRAM OF THE MISSISSIPPI VALLEY MEDICAL ASSOCIATION MEETING AT PUT-IN-BAY ON 12, 13, AND 14TH SEPT.

The next annual meeting of the Mississippi Valley Medical Association, under the Presidency of Dr. A. H. Cordier, of Kansas City, bids fair to eclipse all previous ones in attendance as well as scientific merit, as the following preliminary program will show.

Unusual railroad rates have been obtained for this meeting—a one-fare rate by way of Cleveland, which will enable those taking advantage of these rates to obtain an extension of tickets to October 8th for attendance upon the Buffalo Exposition. A one-and-a-third fare rate on the certificate plan will be in effect via Detroit, Sandusky, and Toledo, with extension of return limit for only three days after the meeting.

Put-in-Bay is an ideal place of meeting, the Hotel Victory a magnificent meeting site.

The address in Medicine will be made by Dr. Frank Billings, of Chicago; the address in Surgery by Dr. Reginald Sayre, of New York City. The Association is to be congratulated on the selection of these two orators, who will acquit themselves in a most scholarly manner.

The annual banquet will be held on the evening of the first day, September 12th; on the second evening, an evening will be given up to the reading of several papers with stereopticon ex-

hibits and demonstrations; the President's address and the annual orations being delivered on the three mornings of the meeting.

The profession is cordially invited to attend this meeting.

No title can be received after August 20th for publication on the final program.

PRELIMINARY PROGRAM.

1. Address in Medicine, by Frank Billings, Chicago.
2. Address in Surgery, by Reginald Sayre, New York City.
3. Address of President, A. H. Cordier, Kansas City, Mo.
4. Pathological Cause of the Eruption in the Exanthemata, by J. M. Postle, Hinckley, Ill.
5. Acute Intestinal Auto-Infection, by John M. Batten, Downingtown, Pa.
6. Surgery of the Palate, with Stereopticon Exhibit, by Truman W. Brophy, Chicago, Ill.
7. Some New Remedial Agents in the Treatment of Gynecologic Affections, by Chauncey D. Palmer, Avondale, Cincinnati, O.
8. Hematology, by L. H. Warner, New York City.
9. Surgical Treatment of Pulmonary Abscess, by D. N. Eisen-drath, Chicago, Ill.
10. The Severing of the Vas Deferens and Its Relation to Neuro-Psychopathic Constitution, by H. C. Sharp, Jeffersonville, Ind.
11. Adrenalin, the Active Principle of the Suprarenal Glands; its Mode of Preparation, by Jokichi Takamine, New York City.
12. Varicose Veins and their Treatment, by J. Lively Johnson, Louisville, Ky.
13. Subdural Hematoma from Pachymeningitis Hemorrhagica Interna, by Charles J. Aldrich, Cleveland, O.
14. Some Obscure Injuries which Follow the First Toxic Action of Alcohol, by T. D. Crothers, Hartford, Conn.
15. Sterilization of Rubber Gloves, Catheters, etc., by Formaldehyd Gas; Correct and Erroneous Culture Tests, by A. Goldspohn, Chicago, Ill.
16. Auto-Intoxication and its Treatment, by Chas. H. Shepard, Brooklyn, N. Y.
17. Aboriginal American (Indian) Contribution to Therapeutics, by B. T. Whitmore, New York City.
18. The Bed-Treatment of the Insane, by Frank Parsons Nor-bury, Jacksonville, Ill.

19. The Clinical Diagnosis of Carcinoma of the Esophagus and the Technique of Gastrostomy, by Charles G. Cumston, Boston.
20. Clinical Notes on Gleet, by A. Ravogli, Cincinnati, O.
21. Dentists' Neck, a Hitherto Undescribed Neurosis, by Albert E. Sterne, Indianapolis, Ind.
22. The Value of Mechanical Appliances in the Aid of Intestinal Suture, by Edward H. Lee, Chicago, Ill.
23. A Discussion of the Morbid Conditions of the Upper Respiratory Tract Resulting from the Infectious Diseases, by Colus M. Cobb, Boston, Mass.
24. Congenital Valvular Obstipation, by Thos. Chas. Martin, Cleveland, O.
25. Features Determining Permanency of Cure in Radical Operations for Hernia, by A. J. Ochsner, Chicago.
26. Science and Christian Science, Their Claims and Miracles, by Paul Paquin, Asheville, N. C.
27. Gastric Lavage, Its Uses and Abuses, by Thos. Hunt Stucky, Louisville, Ky.
28. Some Causes of Ignored Syphilis and their Remedies; Clinical Examples Demonstrated from Lantern Slide Reproductions, by M. L. Heidingsfeld, Cincinnati, O.
29. A Few Cases of Hysteria, by Hugh T. Patrick, Chicago, Ill.
30. A New Method of Controlling Hemorrhage in Operations upon the Head and Neck, by George W. Crile, Cleveland, O.
31. Tripartition in the Study of the Female Pelvis, by A. Ernest Gallant, New York City.
32. Scientific Aids to Diagnosis, by Henry D. Holton, Brattleboro, Vt.
33. How should Appendicitis Cases be Treated? by Jos. Price, Philadelphia, Pa.
34. A Case of Unilateral Fulminating Optic Neuritis Cured by Trephining the Sphenoidal Sinus, by J. O. Stillson, Indianapolis, Ind.
35. Surgical Cases from a Medical Standpoint, by I. N. Love, New York City.
36. The Surgical Features of Typhoid Fever and Dysentery, by Hal. C. Wyman, Detroit, Mich.
37. Surgical Intervention in Pulmonary Abscess, with Illustrative Cases, by W. J. Macdonald, Albany, N. Y.
38. Report of One Hundred Cases Operated for Appendicitis, by Wm. J. Gillette, Toledo, O.

39. The Surgical Treatment of Diseases of the Stomach, by A. Vander Veer, Albany, N. Y.
 40. Some Indications for Gastroenterostomy, by Wm. J. Mayo, Rochester, Minn.
 41. The Young Doctor, by Emil Amberg, Detroit, Mich.
 42. Fractures, by E. B. Smith, Detroit, Mich.
 43. Cancer of the Uterus, by Louis Frank, Louisville, Ky.
 44. Floating Liver, with Report of Case, by J. H. Carsters, Detroit, Mich.
 45. The Acquirement of Nervous Health, by F. Savary Pearce, Philadelphia, Pa.
- And papers are promised by the following: H. N. Moyer, Chicago; N. Stone Scott, Cleveland, O.; C. F. McGohan, Bethlehem, N. H.; Jarvis N. Jackson, Kansas City, Mo.; H. B. Kinzer, Bristol, Tenn.; A. M. Phelps, New York, N. Y.
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PROGRAMME OF THE AMERICAN ASSOCIATION OF OBSTETRICIANS AND GYNAECOLOGISTS. MEETING IN CLEVELAND, 17, 18 AND 19 SEPT.

The American Association of Obstetricians and Gynecologists will hold its fourteenth annual meeting at the Hotel Hollenden, Cleveland, O., Tuesday, Wednesday and Thursday, September 17, 18 and 19, 1901, under the presidency of Dr. William E. B. Davis, of Birmingham, Ala. These meetings are open to all members of the profession, and they are cordially invited to attend and take part in the discussions. The committee of arrangements is composed of Dr. M. Rosenwasser, 722 Woodland Avenue and Dr. William H. Humiston, 122 Euclid Avenue, Cleveland, either of whom may be addressed concerning rooms or other local information regarding the meeting.

The following list of papers is offered:

1. The president's address, William E. B. Davis, Birmingham.
2. Indications for the combined vagino-abdominal operation of hysterectomy, Rufus B. Hall, Cincinnati.
3. Title to be announced, Henry D. Ingraham, Buffalo.
4. A method for suspension of the uterus, Robert T. Morris, New York.
5. Tubercular peritonitis, experimental and clinical, John B. Murphy, Chicago.
6. Report of a case of acute pancreatitis and fat necrosis, Edward J. Ill, Newark.

7. Pelvic and abdominal tumors complicating pregnancy, with report of cases, Rufus B. Hall, Cincinnati.
8. Pathology and treatment of hourglass stomach, with report of two cases, Charles G. Cumston, Boston.
9. Early operations in appendicitis and method, Joseph Price, Philadelphia.
10. Title to be announced, J. Henry Carstens, Detroit.
11. The undeveloped uterus, C. L. Bonifield, Cincinnati.
12. An interesting case of tubo-abdominal pregnancy, Wm. H. Humiston, Cleveland.
13. Title to be announced, Walter B. Dorsett, St. Louis.
14. Title to be announced, C. C. Frederick, Buffalo.
15. Report of a case of ruptured tubal pregnancy, Webb J. Kelly, Galion, O.
16. Diseases and injuries of the cervix uteri and their treatment, Joel W. Hyde, Brooklyn.
17. Title to be announced, L. H. Dunning, Indianapolis.
18. Title to be announced, James F. W. Ross, Toronto.
19. Extrauterine pregnancy; report of cases with specimens, George S. Peck, Youngstown.
20. Is Cesarean section justifiable in placenta previa? E. Gustav Zinke, Cincinnati.
21. Title to be announced, Edwin Walker, Evansville.
22. Some reflections on ectopic gestation, David Tod Gilliam, Columbus.
23. Some forms of disease involving the uterine appendages, Augustus P. Clarke, Cambridge.
24. The mechanical, or combined plastic and mechanical treatment of retrodeviations of the womb, M. Rosenwasser, Cleveland.
25. Title to be announced, H. E. Hayd, Buffalo.
26. New method of opening the abdomen in gynaecological surgery, Chas. G. Cumston, Boston.
27. A second contribution to the surgery of gastric ulcer, Henry Howitt, Guelph, Ontario.
28. Indications, technic, and remote results of a salpingostomy, and of resection and ignipuncture of ovaries, with tables of 104 cases, A. Goldspohn, Chicago.

New Books.

PRINCIPLES OF SURGERY. By Nicholas Senn, M. D., Ph. D., LL. D. Professor of Surgery in Rush Medical College in Affiliation with the University of Chicago; Attending Surgeon to the Presbyterian Hospital; Surgeon-in-chief to St. Joseph's Hospital; Surgeon General of Illinois: State Lieutenant-Colonel of the United States Volunteers and Chief of the Operating-Staff with the Army in the Field during the Spanish-American War. Third Edition. Thoroughly Revised with 230 Wood Engravings, Halftones and Colored Illustrations. F. A. Davis Co. Publishers, Philadelphia and Chicago. 1901.

Perhaps no man in America has given so much of thought, time and work along the line of surgical pathology as Nicholas Senn. The charm of this work lies in the surgical procedures being outlined after a study of the exact pathology of the condition, and the deductions—oftentimes italicised to impress it on one's memory,—are so definite and follow so naturally from a study of the pathology that they could almost be called surgical axioms. The work is a combination of qualities rarely seen together in works of this character—intensely scientific and intensely practical.

This, the third edition of the book has been thoroughly revised and two new chapters added, one on Degeneration and one on Blastomycetic Dermatitis. The chapters on surgical tuberculosis are particularly excellent.

PRACTICAL SURGERY: A WORK FOR THE GENERAL PRACTITIONER. By Nicholas Senn, M. D., Ph. D., LL. D., Professor of Surgery, Rush Medical College, Chicago. Handsome octavo volume of 1133 pages, with 650 illustrations, many in colors. Philadelphia and London: W. B. Saunders & Co., 1901. Cloth, \$6.00 net.

This is Dr. Senn's great work, and its appearance has been awaited by the profession with much interest, for it represents the practical operative experience of the author for the last twenty-five years. The book deals with practical subjects, and its contents are devoted to those sections of surgery that are of special interest to the general practitioner. Familiar with the needs of the general practitioner as a surgeon, the author has aimed to simplify and lighten his often trying work by a full discussion of those subjects that come within the legitimate sphere of the daily routine work of every practicing physician. Special attention is paid to emergency surgery. Shock, hemorrhage and wound treatment are fully considered. All emergency operations that come under

the care of the general practitioner are described in detail and fully illustrated.

The section on Military Surgery is based on the author's experience as chief of the operating staff in the field during the Spanish-American War, and on his observations during the Greco-Turkish War. Intestinal Surgery is given a prominent place, and the consideration of this subject is the result of the clinical experience of the author as surgeon and teacher of surgery for a quarter of a century. The text is profusely illustrated, in the hope that this feature will add to the value of the book as a guide to practice.

DISEASES OF THE INTESTINES. By Dr. I. Boas, Specialist for Gastro-Intestinal Diseases in Berlin. Authorized Translation from the first German Edition with Special Additions by Seymour Basch, M. D., New York City. With 47 Illustrations.

The popularity which Dr. Boas's treatise has enjoyed abroad, and the absence in the English language of any detailed and exhaustive work on intestinal diseases, have led to the publication of the present translation. Without neglecting those diseases which are generally met with in hospital practice, the author has given special prominence to the affections which the private practitioner is called upon to treat—e. g., intestinal catarrhs and ulcers, duodenal ulcer, chronic constipation, rectal diseases, intestinal neuroses, etc.

Additions have been made to the chapters on Appendicitis and Hydrotherapeutics, a special account given of the intestinal gases, and brief notes added in various parts of the book.

A TEXT-BOOK OF THE PRACTICE OF MEDICINE. By Dr. Hermann Eichhorst, Professor of Special Pathology and Therapeutics and Director of the Medical Clinic in the University of Zurich. Authorized Translation from the German, Edited by Augustus A. Eshner, M. D., Professor of Clinical Medicine in the Philadelphia Polyclinic; Physician to the Philadelphia Hospital; Assistant Physician to the Orthopedic Hospital and Infirmary for Nervous Diseases. In two volumes. With 169 illustrations. W. B. Saunders & Co., Philadelphia and London, 1901.

For those who read German no introduction to this work is necessary, and for those who do not, the translation will prove a most useful addition to medical literature.

The text will be found at once concise and comprehensive. The book differs somewhat from most other works on the practice

of medicine in containing, among other things, appropriate sections devoted to a consideration of diseases of the skin, the venereal diseases, impotence and sterility in the male, and spermatorrhea.

The work deals only with the established facts of the practice of medicine and will, therefore, prove especially valuable to the busy practitioner.

THE HYGIENE OF TRANSMISSIBLE DISEASES: THEIR CAUSATION, MODES OF DISSEMINATION AND METHODS OF PREVENTION. By A. C. Abbott, M. D., Professor of Hygiene and Bacteriology, and Director of the Laboratory of Hygiene, University of Pennsylvania. Second Edition, Revised and Enlarged. With 46 Illustrations and 20 Charts. W. B. Saunders & Co., Philadelphia and London, 1901.

In the second edition the original plan of the work has not been altered, although numerous additions have been added, and opinions formerly expressed have been modified to conform with the results of more recent observations and investigations. The sections especially on Malaria, Yellow Fever, Plague, Filariasis, Dysentery and Tuberculosis have been revised and enlarged, making this edition most complete in every particular.

ESSENTIALS OF REFRACTION AND OF DISEASES OF THE EYE. By Edward Jackson, A. M., M. D., Emeritus Professor of Diseases of the Eye in the Philadelphia Polyclinic. Third Edition. Revised and Enlarged. 12mo., 261 pages, 82 illustrations. Philadelphia and London: W. B. Saunders & Co., 1901. Cloth, \$1.00 net.

In this edition the work has been carefully revised and very much enlarged, the contents being more complete and more symmetrical than was possible in the earlier editions. The injuries of the eye by traumatism, and the ocular symptoms and lesions of general diseases have now been given a consideration proportioned to the great importance they assume in the work of the general practitioner. There has been added also an account of the application of the tests of vision required in the army, navy and railway service.

This work has long since proved its usefulness to the beginner in ophthalmic work, to the student, and to the busy practitioner. Dr. Jackson, its author, is well known as a successful teacher. The entire ground is covered, and the points that most need careful elucidation are made clear and easy.

THE DIAGNOSTICS OF INTERNAL MEDICINE. A Clinical Treatise upon the Recognized Principles of Medical Diagnosis, Prepared for the use of Students and Practitioners of Medicine. By Glentworth Reeve Butler, A. M., M. D., Chief of the Second Medical Division, Methodist Episcopal Hospital; Attending Physician to the Brooklyn Hospital; Consulting Physician to the Brushwick Central Hospital; formerly Associate Physician, Departments of Diseases of the Chest and Diseases of Children, St. Mary's Hospital, Brooklyn, N. Y.; Fellow of the New York Academy of Medicine; Member of the Medical Society of the County of Kings, etc. With five colored plates, and two hundred and forty-six illustrations and charts in the Text. New York, D. Appleton & Co. A. S. & R. W. E. Southworth, 204 Superior street, local agents for Appleton.

This work has been written from the point of view of practical clinical work and divides itself into two parts: first, a study of symptoms and their indications; and second, a study of diseases and their characteristics. The book is most complete and thorough in its treatment and contains practically all that is necessary for the making of a diagnosis.

The sections treating of modern laboratory methods are not the least useful part of the volume.

Society Proceedings.

May L. Bassett, Medical Reporter.

THE CUYAHOGA COUNTY MEDICAL SOCIETY.

Regular Meeting, June 27, 1901.

The regular meeting of the Cuyahoga County Medical Society was held at the Medical Library, Thursday evening, June 27th. The meeting opened with Dr. G. A. Hamann, the president, in the chair. The minutes of the last meeting were read and approved.

Dr. Schmoldt exhibited a specimen of a kidney having two ureters and two distinct openings. It had been removed from a young girl of nineteen who had died of pneumonia.

Discussion.

Dr. Lower: I am not familiar with a similar case in which there existed two distinct ureters with separate urethral openings in the bladder. It seems to me that such a condition might be very confusing in urethral catheterization. These two ureters drain two separate and distinct parts of the kidney. I should like to inquire of the President what number of such cases exist, and whether he is familiar with similar cases.

Dr. Hamann: Specimens of this sort are quite unusual. I have no figures at hand as to their frequency. It is not very un-

common to find two ureters separate from each other nearly to the bladder, but they usually unite before emptying into that viscus.

Dr. Aldrich: I have here a spinal cord which was taken from a patient who died at the City Hospital. It shows how very marked an inflammation we can have and yet the patient remain conscious up to the last day of death. This specimen shows the deposit of fibrin upon the cord very plainly. There was nothing of particular interest about the case except the pathological specimen found and the fact that the illness began with convulsions, showing how rapidly the epidemic variety of cerebrospinal meningitis sometimes begins. The illness extended over something like three weeks. He would have intervals in which he appeared about to recover and then be very ill again—seeming to be one of the intermittent cases.

Moorehouse: Just a word about a case that was reported to a medical society in Cleveland some time ago, because it is interesting as presenting a great contrast in its clinical features with the case reported by Dr. Aldrich, although the underlying pathological process was the same. A young colored man came to the Lakeside Hospital asking for admission, his complaint was of slight headache, but of nothing else that would seem to make him a suitable case for hospital treatment. Having about decided to turn him away I took his temperature and found it 102 degrees F., and solely upon this finding admitted him to the ward. He died in about 60 hours after admission. The symptoms upon which we made the clinical diagnosis of cerebro-meningitis were: The temperature, which was sometimes normal and sometimes elevated, a marked leucocytosis, a slight transient stiffness of the neck, and sudden death during a slight convulsion. The pathological findings in our case so poor in clinical features were much the same as in this which was so rich in them.

Dr. Aldrich: The remark of Dr. Moorehouse reminds me that it is also true that we observe fatal cases of cerebro-spinal meningitis which exhibit little or no changes on post mortem examination. I recall one case admitted to the hospital at the same time as this one cited, which was a very violent one, and examination at post mortem revealed very little inflammation of the spinal cord. He died very suddenly and yet the pathological change found at autopsy would hardly account for death. Various authors state that these cases do occur with very little pathological change. The cause must be due to excessive toxicity of the infection.

Report of a case of thrombus by Dr. Aldrich. Discussion:

Dr. Hamann: The internal jugular, subclavian and axillary veins were occluded, and when I saw the case the clot extended nearly to the elbow. As the cephalic vein could not empty itself, it is difficult to understand the absence of œdema and of distension of the superficial veins. The recognition of the nodular enlargement at the position of the valves of the veins is of aid in the diagnosis of venous thrombosis.

Dr. Aldrich: I would like to add that this thrombus must have entered the innominate and formed considerable obstruction there in addition to filling the subclavian and passing along the axillary.

Report of a case of multiple abnormality by Dr. F. W. Kelly.
Discussion:

Dr. Stern: I can add nothing to the theories concerning the cause of these congenital malformations, for in my opinion all our theories which we have formulated up to the present time fail to give a satisfactory explanation. I would like to add one more abnormality to this case which Dr. Kelly has so ably described, and that is, that here we find a case of congenital dislocation of the hip joint in conjunction with other abnormalities. All the cases of hip joint dislocation which I have seen have been in well developed, perfectly-formed children, most of them pretty, with rosy cheeks and strong bodies. The combination of so many and varied deformities is rare and well worth such an accurate description.

Dr. Hamann: Congenital dislocation of the shoulder is exceedingly rare and I should like to ask Dr. Kelly how the forearm was and the scapula and also whether there was an malformation of the genitalia.

Dr. Kelly: In regard to the forearm, it appeared about normal so far as I could see, and the genitalia also. The scapula appeared normal too, with the exception of the shortness of the articular end. The shoulder joint seemed to be crowded in and there was a bending forward of the clavicle at its outer end. Whether there was a fracture or a bending of it, or whether the shoulder had simply grown that way, we do not know. There are many other theories concerning the causation of such conditions, but I have omitted them, as it would take a whole evening to discuss them all.

Review of Pathological work at City Hospital for the past six months with presentation of specimens, by Dr. H. C. Crumrine. Discussion.

Notes and Comments.

Dr. C. W. Stoll of Dover, was in the city on the 19th.

Dr. D. B. Smith spent a week in Buffalo during August.

Dr. C. W. Smith has returned from a week at the Pan-American.

Dr. John Perrier spent several weeks in Nova Scotia during August.

Dr. A. C. Brant, of Canton, has returned from a visit to Buffalo.

Dr. and Mrs. George H. Quay spent two weeks at Georgian Bay in July.

Dr. and Mrs. D. F. Baker have returned from a sojourn at The Lakeside.

Dr. John N. Lenker has returned from his vacation in eastern Pennsylvania.

Dr. L. A. Arner and son Louis, of Jefferson, O., visited Cleveland in July.

Dr Lillian G. Towslee has been spending a short time at Little Mountain, O.

Dr. George E. Upson is having a new house built on Case Ave., near Sibley St.

Dr. Charles L. Webster spent a week in Buffalo during the early part of August.

Dr. J. E. Stephan is absent on a trip through the Adirondacks and to Georgian Bay.

Dr. A. R. Baker was laid up for a short time in August with a cellulitis of the foot.

Dr. and Mrs. Wm. E. Shackleton and Miss Shackleton were in Canada during August.

Dr. G. W. Moorehouse has been appointed acting superintendent of Lakeside Hospital.

Dr. Charles J. Aldrich spent a week in Buffalo and at the Pan-American during August.

On August second, to Dr. and Mrs. G. C. Lathrop, Dover, a daughter.

Dr. James C. Wood and family have been spending a part of the summer in Cohasset, Mass.

Dr. and Mrs. W. F. Brokaw have been visiting the Pan-American and the Adirondacks.

Dr. John M. Ingersoll was confined to his house for a week during August, through sickness.

Dr. W. P. McClure of Elyria, has returned from a vacation of several weeks spent in Ontario.

Dr. A. S. Elliott of 2794 Euclid Ave., died at Charity Hospital on 2nd August of typhoid fever.

Dr. and Mrs. Howard Mellor, of Philadelphia, have been the guests of Dr. Milton Brown, of Ashtabula, O.

Dr. E. L. Ortt and family, who have been engaged in missionary work in Porto Rico are now at Canton, their old home.

Dr. John M. Peters superintendent of the Rhode Island Hospital, in Providence, spent a few days with Dr. Geo. Seeley Smith during July.

Dr. Fritz Fichter, professor of chemistry at the University of Basel, Switzerland, was the guest of Dr. John G. Spenser for a few days during August.

Dr. J. L. Dusic, Class of 1900, W. R. U., was married to Miss Lavinia Heyner on Monday, August 12. Dr. and Mrs. Dusic will be at home at 2224 Willson avenue after October 15.

Dr. William Nuss, corner Detroit St. and Highland Ave., was married on 1st August to Miss Eva May Bennett, a recent graduate of the Cleveland General Hospital Training School for Nurses.

Dr. Stewart L. McCurdy at present professor of Anatomy and Surgery in the Dental Department of the Western University, has been elected professor of Orthopedic Surgery in the Western Pennsylvania Medical College (Medical Department of the Western University of Pennsylvania). Dr. McCurdy taught Orthopedic Surgery in the Ohio Medical University for four years and is a member of the American Orthopedic Association since 1892.

Dr. P. Maxwell Foshay has been appointed, by Governor Nash, as one of the board of trustees of the State Hospital for Epileptics at Gallipolis, O. We congratulate Governor Nash on his selection and Dr. Foshay on the honor.

The Nebraska State Medical Society has succeeded in getting an appropriation from the Legislature to classify and take care of its library.

The American Public Health Association is to hold its twenty-ninth annual meeting at Buffalo, N. Y., on September 16, 17, 18, 19 and 20.

The National Jewish Hospital, located in Denver, has been given \$25,000 by W. Guckenheims' Sons of New York, and \$5,000 by S. Grabfelder of Louisville, Ky.

Fair Oaks Villa, home for nervous and mental invalids at Cuyahoga Falls, Ohio. Cases limited and selected. Dr. W. A. Lease, the superintendent, may be consulted at his city office, 736 Rose Building, on Wednesdays and Saturdays from 10 a. m. to 1 p. m.

Deformities of the feet, which are beyond cure, often come to the physician for treatment and much can be done in the way of relief by the fitting of comfortable shoes. The physician should not send these cases to the instrument maker, who, in his turn, is obliged to call upon the boot-maker, but should send them direct to someone who is skilled in this particular branch. Send your patients afflicted with deformities or tender feet to Frank Gaetani, 355 Bond St., opposite The Hollenden, Cleveland, as he makes a specialty of such work.

Ulcerated Cornea. A most satisfactory treatment of corneal ulcerations is by means of the actual cautery. This may be used in the form of the electrocautery, thermocautery, or by an instrument heated in an alcohol lamp. As a rule, I prefer the latter method. Any small, smooth piece of steel, large silver probe, or knitting-needle is much easier handled by the novice than the clumsy cautery handles with their stiff, attached conducting cords. In the use of these cauteries, great care must be used not to puncture the cornea, and where the ulcer is deep, this is a delicate operation. By means of a good light, and with a delicate touch, we can usually avoid this accident. It has only happened to me once in my seventeen years of eye practice. Persons without a steady hand, and a delicate touch had better not attempt it, or for that matter not much other eye surgery.

After cautery, atropine should be used. As a rule, one cauterization is sufficient, but at times there occur cases where, in spite of repeated cauterization, and all other means, the disease goes on to perforation or to complete destruction.—*Northwestern Lancet*.

Medical Schools for Turkey. According to a cable from Constantinople, the sultan has issued a decree ordering the establishment of medical schools at Bagdad, Damascus, Smyrna, and Adrianople.

The University of Glasgow Honors a San Francisco Physician. At the recent celebration of the four hundred and fiftieth anniversary of the founding of the University of Glasgow (Scotland), Dr. A. Barkan, delegate from Cooper Medical College, of San Francisco, was made a Doctor of Laws by the university.

World's Heaviest Baby. Probably the heaviest baby in the world for her age is the daughter of George Minnis of Atlantic, Crawford county, Pennsylvania. She is eight months old, her bust measure is 31 inches, weight 51½ pounds, she is in perfect health. Her parents are below the average in height and weight.

A Professor to Study Pathology Abroad. Professor W. M. Ford, of the Johns Hopkins University, Baltimore, who was recently appointed to the Rockefeller research fellowship in pathology at McGill University, has left for Paris, France, where he will remain until the new pathological laboratories are completed at the McGill Faculty of Medicine. During his sojourn in Paris he will conduct a series of experiments in the department of pathology at the Pasteur Institute in that city on the lines suggested by the medical staff of the Rockefeller Institute in Chicago. He expects to return to Montreal in September next, when he will commence active research work at McGill.—*N. Y. Med. Jour.*

Ludington, Mich., Engages a Community Doctor. The citizens of Ludington, Mich., have formed a pool for the employment of a physician. The local physicians recently organized to fix visit fees, and the new schedule seemed to be too high to the bill payers. Therefore, about 200 families organized to employ a physician at a fixed salary of \$1,800 a year. The salary is made up by monthly assessments and by terms of the contract the doctor is required to respond to all calls from members of the organization. If any member sends in a needless call, a fine is charged up to him. Dr. Bart, who recently graduated from the State University, is the community doctor.—*N. Y. Med. Jour.*

Going to Bed Hungry. This is a relic of the misconception of the laws of hygiene following physiological investigations in the early part of the last century. Man is the only animal who was ever foolish enough to voluntarily go to sleep while hungry. Judging from the advice now given by thinking physicians, the practice will soon become a mere tradition.—*Diet and Hygienic Gazette*.

Permission asked to bury a man alive. The request of Dr. J. T. Beterio for permission to bury a man alive to demonstrate that bodily functions can be suspended by hypnotic influence has been refused by the Chicago Health Department. The position taken by the officials is that they have jurisdiction over the interment, exhumation, and disposal of dead bodies, and that in case they gave a burial permit for a live body, and death resulted, they would be indictable.

Virchow's eightieth Birthday. It is proposed to formally celebrate Professor Virchow's eightieth birthday on Saturday, October, 12th, at Berlin, when he will personally receive delegates with congratulatory addresses from various scientific bodies, foreign as well as German. The affair is under the personal direction of Professor Waldeyer, of Berlin, as president of the executive committee, who will furnish any information required by societies who propose to either send delegates or present addresses on this occasion.

Cramps of the Legs. Dr. John McDonald, after discussing the causation of cramps, their relation to the valveless condition of the inferior vena cava, and consequent great hydraulic pressure, to constipation with its pressure on the iliac veins, and to the gouty diathesis leading to the deposit of urates in the muscles surrounding the congested veins of the legs, says that in the remedial treatment of cramps, the attention should be directed mainly toward (1) the relief of constipation; (2) the removal of the uric acid toxine; and (3) the establishment of a better nutrition.

It is obvious that for this purpose, an effective cholagogue agent is of the first importance to stimulate cellular action of the liver; increases its normal secretions, and initiate peristalsis; and that, combined with an appropriate uric acid solvent, the circulation of the blood may be quickened, while at the same time its subalkalinity may be neutralized and oxidation increased by the removal of the toxine mainly responsible for the abnormal condition.

A more active interchange having thus been established between blood and tissue, the former being better enabled to per-

form its function of removing poisonous waste, the nutrition of the latter becomes improved, and the third indication is fulfilled. The author records a case of obstinate cramps treated successfully on these lines.—*Northwestern Lancet*.

A Systematic Effort to Exterminate Mosquitoes being made on Staten Island. Convinced that malaria is spread by mosquitoes, Dr. Alvah H. Doty, health officer of the port, has begun a war of extermination on the mosquitoes of Staten Island. He has laid out a section of the island about three miles long by a mile and a half wide, bounded by the upper and lower bays, Vanderbilt Avenue, Richmond Road and New Dorp Lane. In this territory is a large extent of salt-water marsh and many fresh water "pockets." Men are making a map of the marshes, pools of stagnant water, cisterns, and cesspools. It is proposed to employ crude petroleum, and Dr. Doty is having machines made with perforated pipes, with which the oil can be released under the water and kill all germs in it. It is his opinion that the use of petroleum has not been entirely successful heretofore for the reason that it has been simply sprayed on the surface of the pools and blown off by the first breeze.—*N. Y. Med. Jour.*

Passing the Catheter. When you attempt to introduce the catheter into the bladder where the prostate gland is enlarged, remember the sinus pocularis. Well, how will you avoid it? Oil the index finger of the right hand and introduce it into the rectum. After introducing your catheter hold it in the left hand and push it down until you meet the obstruction. Then follow the catheter with the index finger to its point—I mean the index finger in the rectum—gently raise it up, apply a little more force with the left hand, and ninety-nine times out of a hundred you will be surprised to find how easily the instrument enters the bladder. I can say without boasting that I have never failed in this simple operation in my life, and it is seldom now that I ever draw blood or give the patient much pain.

Never try to introduce a catheter into the bladder where the prostate gland is enlarged without having the finger in the rectum to spread the lateral lobes apart and lift the point of the instrument above the sinus pocularis.—*Ex.*

Effect of the Weather on Health. The relation of climatology to health and disease is no new subject. Hygiene and meteorology have for a long time been known to be co-related to an important degree. In fact, atmospheric influence upon health is men-

tioned in ancient history. Over four thousand years ago, the frequency and fatality of diseases during the manifestations of certain atmospheric phenomena were noted and attributed to arbitrary punishment from heaven.

The following propositions are generally held to be true: A preternaturally dry air, with a high temperature, predisposes to the development of fevers and intestinal disorders.

A very moist atmosphere, accompanied by a low temperature, is likely to induce bronchial and rheumatic affections.

In summer and autumn the tendency to sickness and death is chiefly connected with digestive organs.

In summer and autumn a rise of mean temperature above the average, increases the number of cases of, and the mortality from, diseases of the digestive organs.

A cold and rainy summer controls the prevalence and fatality of diarrheal diseases.

Diarrheal diseases become epidemic when the subsoil temperature at a depth of four feet below the surface reaches 56 degrees F. for the season.

The physiological effects of climate embrace the degrees of humidity, fogs, cloudiness, sunshine, force and direction of wind, purity of atmosphere, and the quality and energy of all the meteorological influences.—*Ohio Sanitary Bulletin*.

In every case of gonorrhea warn your patient of the danger of conveying the disease to the eyes by the fingers, and of the fearful results of gonorrheal ophthalmia.

Dr. W. C. Brown, Austin, Ill., says: Papine is an excellent preparation of opium, having less tendency to produce constipation and decrease of normal secretions, in its uses for affections which call for an opiate. It is pleasantly opposed to all painful conditions.

Strangulated Hernia.—Surround the tumor with vaseline, elevate the pelvis, flex the thighs, and pour ether upon the constricted neck. Depletion of tissue, shrinkage, relaxation, render reduction possible.—*Med. Rev.*

Unpaid Assessments.—Ontario physicians who have not responded to the demands of the Medical Council to pay all arrears of assessments have had their month of grace extended thirty days. After June 19 prosecutions will be commenced. Dr. Pyne, the registrar, states that all but 300 of the 2,500 have paid up to date.

In bad cases of burns or other severe and painful injuries, it is advantageous to give chloroform for the first dressing, or at least to give a hypodermic injection of morphia. This diminishes the pain and fear, and consequently lessens the shock.—*Internat. Jour. Surgery.*

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The treatment of intestinal indigestion resolves itself into the consideration of the principles of dietetics. As in many other conditions, each case is largely a problem in itself, and must be treated individually. Most cases are caused by abnormal fermentation; therefore starches, sugars, and fats should be interdicted, and proteids in the form of lean meats given. However, excessive amounts of proteids may be the very cause of the disorder, in which cases all albuminous substances should be expunged from the diet-list, and some form of carbohydrates substituted. Predigested foods and artificially prepared enzymes have been used with varying degrees of success. Drugs cannot cure intestinal indigestion, but they may be of inestimable value in overcoming the hyperacid condition, and inhibiting the action of bacterial fermentation.—*A. P. Stoner, in Med. Record.*

Removal of Foreign Bodies from the Ears.—Ceruminous deposit is a frequent cause of deafness; however, this is very readily remedied by a syringe and warm water, though it is sometimes necessary to soften the wax by filling the ear with a solution of bicarbonate of soda at bedtime. It can usually be easily removed the following day. The ears should be washed only with warm water, and no cold solution should be used in the ear. The physician is frequently called upon to remove foreign bodies from the ear, such as insects, grains of wheat, corn, beans, slate pencils, etc. Sweet oil or glycerin will usually kill or quiet an insect, after which it can be removed like any other foreign body, that is, by means of a syringe and warm water. Never use a probe, ear-spoon, or forceps in these cases, as great injury has been done with these little instruments while contending with a struggling child. Foreign bodies sometimes remain in the ears for years without doing injury, so there is no need of haste, excitement, or forcible methods in dealing with them.—*Med. Summary.*

Some Points Relating to Varicocele.—For practical purposes, varicocele is merely varix of the veins of the spermatic cord, which is always congenital; to this is added in many cases some varicosity of the veins of the scrotum. The peculiarity (it can not be called a disease) usually escapes notice until puberty, and, when noticed, it is most commonly discovered by accident, unless some injury has occurred to attract attention to it. As a rule, no trouble arises from the abnormality. From mental causes a considerable number of persons suffering from varicocele are led to seek treatment, and the majority of these are hypochondriacal. Operation

affords a certain cure for the varicose condition itself, and should be recommended in cases of young individuals, healthy mentally as well as physically. In hypochondriacal cases, should the patient be fully convinced that if the varicocele is cured and the defect removed, relief will follow, operation may be undertaken without hesitation. In about 60 per cent. of such cases in which the operation is attempted the patient is cured; in the other 40 per cent. the treatment will fail. The author describes in brief detail the operation employed by him. An incision of from one-half to three-quarters of an inch—no more—is made over the cord on a level with the upper border of the root of the penis—that is to say, over the external abdominal ring. The whole of the spermatic cord, except the vas deferens, is pulled out of the wound (the veins not being laid bare), ligatures tied at either end, the intervening portion of this cord cut and removed, and the two stumps sutured together. Although the spermatic artery is thus removed, the vessels accompanying the vas deferens are sufficient to nourish the testicle. All fear of atrophy or gangrene may be dismissed.—*British Med. Journal.*

Magnetic Healers are Fined in Missouri.—Professor Stephen A. Weltmer and Joseph H. Kelly, who operated the "American School of Magnetic Healing" at Nevada, Mo., were fined \$1,500 each in the Federal Court on April 26th. The charge was one of using the United States mails for the purpose of fraud, by promising, for a consideration, to cure persons of poverty and all known bodily ills through "absent treatment" and "mental suggestion."

The Proper Way to Give a Hypodermic.—Pick up the entire fleshy mass between the skin and the bone in the less tender part of the upper limb, the back, upper arm or shoulder, and push the needle directly through at right angles to the skin. It should be done with a quick stab, and made to enter the muscle mass. The fluid is then gradually pushed home, after which the needle is withdrawn quicker than it went in, the puncture site being massaged for a moment for the double purpose of obliterating the needle track and promoting absorption of the injected liquid. Try this method once, and you will never want to go back to the other. The patient does not mind it. We have never had an abscess in twenty years' work. It is the only right and least painful way of giving a hypodermic injection.—*Med. Council.*

THE Cleveland Medical Gazette

OCTOBER, 1901.

Original Articles.

OPINIONS IN RELATION TO THE QUESTIONS OF THE SPECIAL COMMITTEE OF THE AMERICAN MEDICAL ASSOCIATION REGARDING THE PROGNOSIS AND TREATMENT OF ACUTE GONORRHEA IN THE MALE.

Compiled and translated by Charles Wood McMurtry, M. D. Clinical
Assistant to the Fourth (Male Veneral) Division of the Royal
Dermatological Hospital at Berlin.

(CONTINUED FROM PAGE 648.)

REPLY OF DR. AUDRY, OF TOULOUSE.

(1) Yes. If the physician attends to it diligently and the patient is willing to care for himself as required and as long a time as is necessary.

(2) All the cases are curable.

(3) A. In acute cases, (I) during the first few hours, in cases of recrudescence, before the purulent condition has been fully established abortion results frequently from the method of Janet; free lavage with permanganate of potash. (II) Once the blennorrhoea is established practice antiseptics of the glans, give balsams internally and await the fourth week for the time when the blennorrhoea has reached a stage approaching chronicity.

B. In chronic cases one blennorrhoea can be cured very easily, others resist. One can always cure a blennorrhoea by the method of Janet only the number of lavages may be considerable. It is sometimes necessary to interrupt them to resume them later. It is a question of patience on the part of the physician.

In general it is necessary to strongly suspect such patients as deceive their physicians and do not follow the prescribed hy-

giente, particularly in regard to the sexual life. It is an explicit rule that a patient who is cured ought not to indulge in coitus without the use of a condom for a period varying from one to six months according to the condition of the canal.

(4) That depends on the conditions (a) if one supposes that this disappearance (of the gonococci) has obtained (see the following question) and that the urethra is without discharge, three to four weeks are sufficient. (b) If that disappearance is certain and the urethra is seeping just a little but without pus, six or seven weeks. (c) If that disappearance is certain but the urethra keeps up a notable purulent secretion, several months must be required or more, that is, a lapse of time indefinite if not infinite.

(5) The ingestion of beer, champagne, white wine, asparagus, alcohol, followed the next morning by microscopic examination of the pus if one can secure any. This should be corroborated by the injection of nitrate of silver 1-50, or of bichloride of mercury 1 to 1000, done likewise in the evening, followed by the examination of the pus the next morning. Two tests of this kind and three other microscopic examinations at intervals of a week will furnish an aggregate of clinical probability equivalent to certitude. To sum up; according to my notion every gonorrhoea is curable in a period varying from two days to six months. The method of Janet is the most sure process and in fact the only sure one, and I have always had to return to it after many a trial. It is much more difficult to cure certain cases of post-gonorrhoeal urethritis. In a general manner the less they are treated the better they get well, but patience and external antisepsis are necessary. It is understood that the preceding conclusions apply only to the male sex. They are based upon the observation of 2000 cases at least during the last eight years. In the University Clinic of which I am in charge, lavages are given by the method of Janet to the outpatients as well as to those in the hospital. Approximately, I may say, more than 1,000 patients have been treated in this way. Among these patients I have seen but one epididymitis result in a case where there was not in addition a violent balanitis. In fact, as for accidents certainly due to the method, I have witnessed one extra peritoneal rupture of the bladder. There was urinary infiltration in the perineal region, which was incised, and the patient got well in a few weeks. In one other case I was called upon to diagnosticate a superficial tear of the mucous membrane, immediate and considerable hemorrhage after a lavage. It got well without complications in a few days.

In general the method of Janet does not give very good results in the acute period. It is better to wait and promote in other ways the diminution of the suppuration.

There exists one special contraindication; the existence of a cystitis.

With regard to the female it is often easy enough to cure gonorrhea so long as the Fallopian tubes are not invaded, but the treatment involves very great care and direct intervention upon the diseased surface, uterine or otherwise.

I opine that surgeons are actually abusing intervention in respect to the adnexa and the uterus; if one can do so he should use time. In a general way in the case of a woman one can express a strong probability in favor of cure, but one never has a certainty thereof; for the duration may be infinite, the latency complete, and the infection manifest quite formidable habits of revivescence.

CH. AUDRY.

REPLY OF PROF. PIEROLEONE TOMMASOLI, OF PALERMO.

Dear Colleagues:—Before replying to the five questions which you have submitted to me, I must thank you with the greatest cordiality, and also the committee, for the trust they have placed in me and for the honor of believing me worthy to speak a useful word on this intricate and difficult question. Besides, I must say in advance that my opinion regarding these arguments can have but a comparative value, probably personal; first, because I am the author of a new therapeutic method in the treatment of chronic urethritis, very possibly judgment from me may be, without my knowledge, not entirely impartial. Second, because up to the present I have been unable to enjoy those conditions of stability and long residence in the same city which are indispensable to lengthy studies and patient clinical observation and comparison, and today I am practicing the specialty of venereology with successive interruptions of some months, and practicing in the midst of a population full of prejudices, very badly educated by the medical men of past generations, not docile, and ignorant to such an extent as not to afford a good field for clinical observation and therapeutical comparisons of value. After these observations to clear my conscience, I may now reply:

First, I believe that gonorrhoea is curable, absolutely curable, so far that the patient can be cheerfully authorized to marry. Moreover, I believe so respecting acute urethritis, when the patient goes as soon as possible to place himself under the care of a conscientious, intelligent and scholarly physician.

Second. The percental proportion of cases of gonorrhea absolutely curable, as for me and according to my experience, is as follows: (a) In anterior urethritis, 95 per cent.; in posterior urethritis, 80 per cent. I must, however, remark that it is a different thing to give a percentage of the cases which we believe curable and a percentage of the cases really curable. In the first case there are only to be accounted for the quality of the disease and the quality of the physician; in the second case, a third element which is very difficult must be accounted for, and that is the quality of the patient, especially his moral condition.

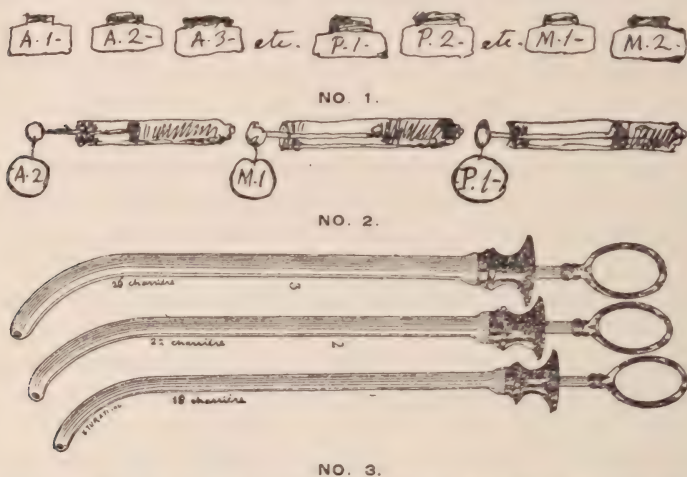
Third. The methods of treatment which in my practice have given the most successful results are as follows: (a) in acute cases:

First. If it be only a case of anterior urethritis I try to subdue the acutest period as rapidly as possible with great quantities of balsams, purgatives, with milk diet or very light mixed diet, and by refreshing the patient with absolute rest, with cold bath to the genitals, kept up for many, many hours. After the acutest period has been subdued I continue with the same hygienic rules, diminishing the rigor somewhat, but I continue also to prescribe balsams, if they are used no longer than ten or twelve days. After a while I begin injections with the ordinary glass syringe with a very short beak, and so I continue to subdue the acutest and subacute period. For injections I prefer in the first place the permanganate of potassium or zinc, then I resort to the sulphonate of zinc; after a while I use a mixture of sulphate of zinc, acetate of lead and alum, regulating the dose of the solution according to the tolerance of the urethra and to the reaction which I see follow each injection.

Second. If instead we have to do with anterior and posterior urethritis, I rely a great deal on the very severe hygiene, especially in the diet, and in absolute rest. I always prescribe mild purgatives. I use balsams freely, trying to make them tolerable as far as possible, and so soon as the acutest and eretistic period has been subdued by the use of the balsams, I give lemonades, prepared with the juice of half a lemon and a tablespoonful of bichlorate, salicylate and bicarbonate of sodium to tolerance. When the acute and subacute posterior urethritis has been completely subdued, then I begin the treatment of the anterior urethritis, as before stated, regulating the choice of the remedies and especially antiseptics and antiphlogistics according to the bacterioscopic report.

(b). In chronic cases, no matter what is the seat and degree of the chronic urethritis, I must affirm that today I do not recognize methods more logical and more effective than those that have been practiced by myself since 1887. The superiority of these methods has been recognized many times also by the public, but the fortune which the method has obtained up to today is very limited. And why? Dr. Isaac has said that it has been for lack of instruments, but I believe that this is not exact. I think that the principal reasons are only two: First, that the name of the author was too obscure and was not weighty enough to secure a recognition in its beginning and to obtain the attention, trust and sympathy of specialists, and so the method has not been put to severe and trying tests: Second, myself, that after I proposed these methods I was compelled to wait nearly ten years before being able to put them to a large application, and in this way by experiment demonstrate their practical value. In regard to defects, the instrument I proposed in 1887 and have advocated since has a great defect in that it is a solid instrument, curved, which must penetrate the diseased urethra; but all of the instruments used in other methods; of Guyon, Ultzmann, Caspar, Unna, etc., and all the instruments which represent the different modifications made of my instrument, as that of Ramargotti, of Isaac, etc., have the same defect and a great many others. In consequence, it is not in the instrument that we must find as Isaac would, the real defect of my method. That defect must be found in the ointments which so far have not been sufficiently studied and perfected either in the matter of the vehicle or in the matter of medicaments best adapted to make these ointments truly useful and speedily efficacious. The treatment of chronic urethritis has the same exigencies as the treatment of irritable eczema. The whole question is to find a remedy which answers to these two requisites. First, to be easily tolerated; second, to be progressively beneficial. Furthermore, in chronic urethritis it is necessary to require an ointment which must not irritate the urethra and must neutralize the traumatic irritation produced by the instrument, and further, must be able to cure the chronic urethritis in all its varieties and with all its consequences and complications. Now, to be able to reach this triple purpose is extremely delicate and very difficult and offers problems always difficult and which vary almost constantly in each individual case. In order to reach satisfactory results, after five years of experiment and of practice, I have finished and have before me a rich series of ointments divided into

different groups, with the qualifications of astringent, antiparasitic or antiseptic, and of modifiers, according to the remedy which prevails in the mixture or according to the different combinations of remedies. In the group of the astringents the sulphates of zinc, and of copper predominate, and then in second line, tannin, oxide of zinc and alum. In the group of antiseptics, salicylic acid and salicylate of methyl predominate. In the group of modifiers are, in the first rank, argonin, protargol, resorcin and ichthyol. But I am using also a mild ointment, iodide, with a salve containing yellow oxide of mercury. How these modifier remedies act, I cannot say; I believe that they have a complex virtue of disinfectants, resolvents, and of being able to revivify the tissues. It is true that their beneficial and prompt action cannot



be denied when they are rationally applied. In these three groups I have many numbers, according to those of the principal elements more or less predominant. In regard to the application of the method, I believe I have reached a more than sufficient degree of simplicity and speed proceeding with instruments illustrated as follows:

First, a series of jars where I keep the different ointments.

Second, a series of large glass syringes filled up with ointment which I use to fill up the instruments for injecting and dilating, after having removed the posterior portion.

Third, a series for injecting and dilating running from No. 18 to No. 26 Charriere.

With these instruments I am able to establish the diagnosis of the degree, the seat and of the extension of the chronic urethri-

tis. From the superficial examination of the urine and from the bacteriological examination of the sediment I am able to establish the quality and quantity of the urethral bacteria. With the graduated sound and with my instrument above illustrated and with the urethrometer of Otis I establish the presence, the quality and the entity of the stricture and of the periurethral infiltration. I see by the objective examination of the patient, by the examination of the shreds in the urine, if the prostate is affected, the ejaculatory ducts, the seminal vesicles, the Cowper glands, and all these, without using the urethroscope except in exceptional and rare cases. When the diagnosis has been precisely established I begin to apply my method according to the diagnosis, keeping strict account, case by case, of the tolerance of the patient and of the urethra, and also of the general peculiarities of the patient, uric acid diathesis, glycosuric diathesis, tuberculosis, etc., in order to proceed with more or less energy, according to the requirements of the same.

Fourth. In order to allow the patient to marry I do not take into great account the disappearance of the gonococcus, first, because the bacteriological examination for the gonococcus in chronic urethritis is too deceptive and not sure. Second, because I admit that there may also exist infective urethritis, acute or chronic, even without gonococci. In order to give consent for marriage I take into especial account the shreds in the urine; and when in two or three weeks after the treatment has been stopped, the patient urinating at intervals of three or four hours, he continues to pass urine without those special shreds which testify positively to the existence of a chronic inflammatory focus, then I tell him he can marry without fear.

Fifth. My method of establishing whether the patient is no more capable of infecting I do not base on the disappearance of the gonococcus, because the gonococci in chronic urethritis often are not present or sometimes cannot be easily seen, and I do not believe that it is possible in every country to compel the patient to submit to those repeated, multiplied and tedious trials to which Professor Neisser subjects his patients. In my country, where the vivacity and the impatience of patients is such an extreme item, no specialist I believe will be able to follow the rules of the school of Breslau, even if he believes them extremely useful. My criterion of the infectivity I base solely upon the secretion which the urine carries with it, the urethral shreds, glandular, prostatic, etc. When the patient urinates in the beakers and has not passed

urine for five or six hours, and when for several times in succession he shows no traces of filaments or shreds of any suspicious character in the beaker, or when he shows only little short shreds, transparent and light, which do not settle to the bottom of the beaker and which after a short time are completely dissolved, being converted into a kind of mucous nebula, then I allow the patient to suspend treatment and return to his ordinary life. If this condition of affairs continues then I advise the patient to make a further trial, a little enjoyment, riding in a carriage or in the train; some strong exercise, strong alimention, and also if the patient is not entirely opposed to it, to try intercourse again. In one word, I invite the patient, when it is possible, to a kind of general trial of an anteroom to the so-called honeymoon and if the candidate happily undergoes this kind of trial, I give my consent without question to his marriage, and send him rejoicing with God.

PROFESSOR PIEROLEONE TOMMASOLI.

THE URINARY ANALYSIS IN 114 CONSECUTIVE, UNSELECTED, ABDOMINAL SECTIONS WITHOUT A DEATH.

BY

HUNTER ROBB, M. D., CLEVELAND.

Before any operative procedures are instituted it is always a matter of routine with us to examine, chemically and microscopically two or more specimens of the patient's urine, which are obtained through a sterile catheter, since, as is well known, the conclusions derived from the examination of voided specimens are not equally free from error. If casts are found in the urine prior to the operation it is our practice to use chloroform for producing the anaesthesia, although in other cases ether is generally preferred. In none of the cases in this series were any marked lesions of the kidney demonstrable. Albumin was found in 20 cases and in 18 of these granular and hyaline casts were demonstrated only after the administration of the anaesthetic. A catheterized specimen of the urine is always examined, on the day following the operation. In 9 cases in which albumin and casts were demonstrated for the first time at this examination, it must be assumed that the anesthetic produced irritation to the kidneys of sufficient severity to cause the casts to appear in the urine. Appended is the chart which we employ in recording the urinary analysis. No. Gynae. No. Name.

Admitted. Ward. Dates. Amount, C. C. Characteristics.
 Specific gravity. Reaction. Sugar. Albumin. Sediment.
 Microscopical examination. Remarks.

CHOREA.*

BY

JAMES H. TAYLOR, A. M., M. D., INDIANAPOLIS.

Professor of Diseases of Children and Clinical Medicine,
 Medical College of Indiana.

During the past few years I have been deeply impressed with the increased number of children afflicted with the various forms of neuroses. My clinics especially have been visited by this class. Many sought relief for "restlessness at night." Many were brought for "nervousness," with the claim that "the teacher had reprimanded them because they couldn't keep still in school."

Many complained of "batting their eyes," or "biting their fingernails;" while some manifested all the symptoms of St. Vitus' dance.

Upon close observation of these so-called "nervous" states, and by repeated examinations after the plan suggested by Landon Carter Gray, I have been convinced that many of these cases should be classed as incipient or imperfectly developed coreas.

Pediatrists have failed to give the subject of chorea that importance which it warrants among the diseases of early life. I certainly agree with Osler in his statement that "chorea is an acute disease of childhood, rarely of adults and of the aged."

This statement is confirmed by most recent writers, who claim that the disease is most frequently seen between the ages of five and fourteen years.

In the discussion of this subject, therefore, I shall confine my remarks to what is commonly recognized as St. Vitus' dance, or the chorea of Sydenham as it manifests itself in childhood and into the stage of puberty. If I mention other forms of this disease—such as chorea of pregnancy, violent chorea, chronic chorea, etc., etc.,—the reference is made simply to indicate the occurrence of these varieties, and to point out the means by which they may be modified or prevented by the early recognition and proper management of the cases met with in childhood. Many theories have been advanced to account for this malady. It is comparatively rare before the fourth year. It is rarely seen among the colored race. It is more often seen in the unsanitary and crowded con-

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ditions of life, yet no social grade or locality is immune. Girls are affected more than twice as frequently as boys, and the former are prone to more recurrent attacks, it being not very rare for females to have the disease recur as often as ten or twelve times.

Hereditary influence certainly plays an important part as a predisposing factor. Openheim says, "that age is especially in danger in which the motor inhibitory apparatus is not completely developed, in which mental excitement uninhibited is transformed into motor actions." According to Joffray, "Chorea is a cerebro-spinal neurosis of the period of growth."

Pianese, in 1891, claimed to have found in the cord and brain of a fatal case, a microbe which, injected into animals, produced symptoms of this disease. The findings of Pianese have not been confirmed.

Several observers have noted the close relationship which chorea bears to rheumatism, and it is an established fact that it occurs extraordinarily often after this disease in its acute articular form.

I think statistics will bear out the statement that chorea is associated with rheumatism in about one-half of all cases.

In the absence of *any one known cause*, I am inclined to hold the following position, viz.:

I. That a child may inherit a vitiated constitution, with a tendency to the development of various neuroses.

II. That rachitis and kindred food disorders and the various diseases of nutrition lay the foundation for the supervention of nervous disorders.

III. That the infection of rheumatism with its resultant anemia, is a potent factor in irritating the nerve centers and in the production of chorea.

IV. That in the exceptionally impressionable child the various peripheral excitants (adhered clitoris, phymosis, pinworms, etc., etc.) may precipitate the symptoms of chorea.

V. That chorea is a self-limited disease, ordinarily tending to spontaneous recovery in from six to ten weeks.

VI. That one attack does not render the patient immune—relapse or recurrence being the rule.

VII. That the prognosis of chorea in childhood is favorable, since the common termination of the disease is in complete recovery.

All are familiar with the symptomatology of this disorder.

Suffice it to say, however, that this form of chorea is characterized by aimless, irregular movements of any or all the voluntary muscles. It is a fibrillary movement—jerky, twitching in character, and totally unlike that seen in any other disease.

The child becomes restless, awkward and careless. These symptoms manifest themselves in variable degree—from movements so mild as not to attract the attention of the mother, to those of such intensity as to almost endanger life.

Church and Peterson, in their treatise, mention, among several varieties, "the grave form," which "manifests itself in an intense exacerbation of the common type," and the "gestational form," with its dire effects both on mother and foetus. These forms should be borne in mind when we have the management of girls nearing the age of puberty—that physiological period with its predisposing hysterical tendencies—and those unfortunate primipara (mostly unmarried) who have been victims of chorea in earlier life.

Those who have witnessed these misguided girls in that condition of mental unrest with its fluctuating periods of apathy and hallucinatory delirium will fully appreciate the above incidental reference to this subject.

In the examination of patients in whom chorea is suspected, the diagnosis is ordinarily obtained with comparative ease. One should bear in mind the "involuntary fibrillary movements consisting either of a jerky twitch, that begins quickly and ends quickly, or of a wavy, undulating movement." I have made it a rule to strip the patient in order to bring into play the muscles of both trunk and extremities. Then, as suggested by Gray, I take the patient's hands in my own, with its palm resting lightly on mine, and sooner or later I experience the characteristic twitch. If the child is re-examined in this manner from time to time and the transient twitchings become more marked, this method forms a link which, added to those of personal and family history, exciting factors, etc., completes the chain of evidence which establishes the choreic nature of the disease.

In some cases, such as are sometimes termed "partial chorea," and to which I have applied the term imperfectly developed chorea, in my list of cases previously mentioned, it requires the closest scrutiny in differentiation. Thus, where the motion is limited to the muscles of the eye or lips alone or larynx alone, etc., local or organic disease might be inferred. I have a patient now under my observation (eight years old and undoubtedly choreic), with an apparent local trouble in the occipito-frontalis muscle.

The time allotted will not warrant further elucidation on the etiology, symptomatology, and diagnosis, and I shall, therefore, arbitrarily omit reference to complications, sequelae, etc., and consider what seems to me of paramount importance relative to this subject—the treatment of chorea.

The prevention of any disease is of primary importance in the line of every physician's duty. If chorea may be classed among the neuroses, infectious or otherwise, it is, in a measure, a preventable ailment. When the child is yet unborn, much may be done in its mother's gestation to lessen the frequent storms of despondency and discontentment; to diminish the many periods of sorrow and anguish; to guard against oft-repeated fits of anger and hysteria—all of which share in their transmitting influence upon the offspring. Let one in such a journey, which is hard enough at best, be guided by the star of encouragement along a pathway of cheerfulness and sunshine, in an atmosphere of peace and harmony, and the result will bring its reward.

A more careful inspection of the improper methods of feeding, bad hygienic conditions and neglect so common in early infancy, and the correction thereof would naturally mitigate the large number of cases of indigestion, intestinal disorders and malnutrition, which are most potent predisposing factors in the production of functional nervous diseases in later childhood.

In the general hygiene of the nervous system, we should note the fact that the brain grows more during the first two years than in all the rest of life. Great injury may be done during this sensitive developmental period. Holt forcibly points out the danger in his statement that "playing with young children, stimulating to laughter and exciting them by sights, sounds or movements until they shriek with apparent delight, may be a source of amusement to fond parents, but it is almost invariably an injury to the child." Parents should be apprised of this and other similar errors and their deleterious effects. If they were taught that the normal healthy development of the nervous centers demands quiet, peaceful surroundings, free from noise, confusion or excitement, much would be accomplished toward the prevention of nervous disorders. Exceedingly bright children are more frequently met among choreic patients. It is a deplorable practice to encourage such children, at the age of three or four years, to memorize a long list of verses, or several pieces, and recite them over and over for the edification of friends. This overstimulation of the brain and nervous system results in a more

rapid waste metabolism, with a corresponding lack of constructive metabolism of nerve-cell growth, which terminates in the child's becoming the victim of some nervous disease—oftentimes chorea.

This is also applicable to older children. Many instances might be cited illustrating the truth of this statement.

There is in my own city, at this time, a precocious youth, who is an example. I refer to "Jack," the thirteen-year-old boy preacher. The auditorium will not hold the crowds of people who throng to listen to the marvelous sayings of this so-called prodigy. The more sermons this premature mind grinds out in a day, the greater is the applause of his listeners. This fact is a burning shame; for it is only a question of time when the main-spring of that intricate machinery of the human mind, under such tension, *must snap*; when the balance-wheel of thought will be injured beyond repair, and the boy will be a physical wreck.

The early corrections of errors of refraction, the early detection and removal of any peripheral excitant that would predispose to disease of the nervous system, the removal of the anaemic and debilitated from unsanitary conditions to better hygienic surroundings,—*all* are prophylactic measures full of promise for good. The prime element in prophylaxis lies in the province of the physician. Where he is consulted about some apparently slight ailment, such as biting of the lips, protrusion of the tongue, or the distortion of a facial muscle, he should not remark, with the customary indifference, "O, that does not amount to anything." This is the time for the doctor to treat the matter seriously. This is the time to check the progress of those latent conditions, which undermine the health and wreck the nervous system. This is the time to take the child out of school. This is the time to make the diagnosis, and outline a plan to stop the development of chorea.

Shall the physician wait till the laity make the diagnosis? This would reflect discredit upon any medical man who had been permitted to see a case in its incipency. Anyone is deserving of censure who neglects to investigate, to the minutest detail, the most *trivial* symptoms in a child, if, in the judgment of the parents, that symptom is of such import as to warrant a physician's advice.

In the treatment of chorea, no specific has, as yet, been accepted. Arsenic seems to have been most generally used, and, while it has been empirically given, its use has received the commendation and support of many authors and practitioners.

No two cases can be managed exactly alike in every detail.

In incipient cases I have given Fowler's solution where the patients would show marked improvement even before the cause of the symptoms could be learned. In some fully developed cases, I have noted not only negative results, but deleterious effects.

In the practice of one of my associates I witnessed a cure from the hypodermic use of Fowler's solution in the sternomastoid muscle (in case of hemi-chorea), where all other remedies had failed.

Antipyrine has been strongly advocated by some. I do not hesitate to affirm, that while drugs are considered of secondary importance in the treatment of chorea, better results would often be obtained, were the associate elements of the disease considered.

For instance, if rheumatism is present, the salicylates are serviceable; if there is a malarial taint, arsenic or quinia may be indicated. Antipyrine has acted so kindly in allaying the nervous element in pertusis that I think it deserves more consideration in chorea.

Rest is indicated in every case. The large per cent. of cases with functional and organic heart complications necessitates rest. The prevention of cardiac lesion should play an important part in the management of every case.

Many patients are anaemic and therefore demand tonics. Any of the digestible forms of iron will meet this demand.

A plain substantial diet should be given in all cases. As the nervous system suffers material impairment—the food should consist of an ample amount of cream and butter, or cod liver oil.

These supply the fat, which is important, not only in its possessing the property of saving nitrogenous waste, but it is required for the growth of nerve cells and fibres.

Sound sleep and plenty of it *must* be obtained. The strength of the child *must* be conserved. The motor agitation is intensified by the average emotional and other disturbances of the waking hours, and the sensitive, rapidly growing nervous system demands, for its delicate machinery, at least ten hours rest every night—even if sleep must be induced by artificial means. A warm bath and a little chloral at bedtime will often accomplish this. A daily nap of two or three hours should be encouraged. The child should abandon its accustomed plays. Older associates should constitute his companions till the disease is on the decline.

In convalescence, under a judicious plan of re-education, the patient may resume the more harmless forms of amusement with his playmates.

In the choreic state there is a general enfeeblement of the muscular system; the muscular wall of the intestine participates in this weakness, and chronic atonic constipation may ensue.

Among the several evils resulting from constipation is the absorption of toxins, which, as exciting factors, may aggravate the already disturbed nerve centers. The bowels should, therefore, be kept open.

The want of time precludes further discussion. Almost every case of chorea is a law unto itself, yet all cases should be managed with a view to secure rest, to support nutrition, to preserve the mental equilibrium, and to the re-education of the motor centers.

Let the pediatricists of the twentieth century assume the responsibility of investigating the causes of chorea. Let them, by a closer observation of the incipient cases, diminish the frequency, and mitigate the terrors of this disease.

STATE CARE AND TREATMENT OF CRIPPLED AND DEFORMED CHILDREN.*

BY

F. H. DARBY, M. D., COLUMBUS.

Christian benevolence, it would seem, should have started up long ago, jealous as it were, of *public charity* and endowed institutions for the care and treatment of crippled and deformed children. Thirty years ago a philanthropist of large means matured his plans, for supplying and maintaining a free hospital in the state for this work; but owing to his death the project failed. That it has not been taken up again by private charity, may be due in part, to the fact that the state has dealt so liberally with other defectives, that it could reasonably be depended on, in due time, to care for this class.

Some provision, either public or private, for these unfortunates, was warmly advocated by Dr. A. G. Byers away back in the seventies. The present Board of State Charities and its able secretary, Mr. Jos. Perkins Byers, believe that it is high time to make a start of *some kind*.

There being no private charity in sight, we advocate State care. The erection of a State hospital for the purpose would seem to be quite in keeping with the usual practice. While this

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would be good, we think that, as a means of getting to work at once, it would be the better plan to patronize institutions already built and equipped for business. A statute short and sweet with an appropriation would make this plan operative. It should provide:

I. For the appointment, by the governor, of five trustees.

II. That the Board of Trustees be authorized and empowered to make provision for the care and treatment in one or more of the already suitably equipped hospitals in or near each of the four largest cities in the State, for any indigent children who may have become a public charge in any county in the state, who are crippled or deformed or are suffering from any disease, through which they are likely to become crippled or deformed. They shall make provision for the maintenance and care for such children on such terms as may be agreed upon between the said Board of Trustees and the managers of such hospitals.

III. The children so provided for, shall receive medical and surgical treatment by the members of the staffs of such hospitals and the members of said staffs shall receive no extra compensation from the state for such medical or surgical treatment.

IV. The said Board of Trustees shall adopt such rules and regulations as they may deem proper and necessary for the admission, discharge, care, treatment, and government of such children.

We have faith in the practicability of this method for the reasons, 1, It is convenient, natural; 2, Numerous counties in the state have made at different times arrangements with hospitals in nearby cities; 3, A similar plan is working successfully in other states.

All cases susceptible of cure or improvement should receive prompt attention. The state ought to be divided into four districts with reference to convenience of territory to our four principal medical centers.

We think that in time it will be deemed wise for the state to build four hospitals, one in or near each of our four largest cities. They would of course be more expensive in administration than one of four times the capacity, but as quality and not quantity is the *desideratum* and as the superiority of the segregate over the aggregate method is universally admitted, we presume no argument would be necessary to procure its adoption. We believe that no expenditure is too great, no place too sacred for the care and comfort of a crippled child.

Along with this care and treatment, mental occupation and instruction by a competent teacher, has been found beneficial, physically as well as mentally. Occupation of their minds, usually very bright, enables them all the more easily to pass the long, tedious months so often necessary to effect a cure. The educational facilities should be provided by the state. Mechanical appliances, such as splints, braces, invalid chairs, etc., should be purchased by and remain the property of the state; while the hospital care, including the attendance of trained nurses, food, washing, medicines, etc., could be negotiated for at a stipulated price per week. No physician now in the state on any hospital staff, would think of making any additional charges because of the occasional admission of one of these poor unfortunates from some county infirmary or children's home. This district plan would make such an equitable division of the work, that the burden would fall but lightly on the members of the profession. In the event of the erection of one or more hospitals by the state, they would, of course, need to be officered with medical superintendents and assistants very much as other state institutions; but the object of this paper and its discussion is to devise a *present* working plan.

Inasmuch as the state has provided so liberally for the feeble-minded, epileptic, incorrigible, deaf, dumb and blind, we think the *lame* and *halt* should receive a just share of attention. The little mites of humanity, too, with only a spark of life left, almost invariably experience relief soon as treatment is commenced. To witness their steady improvement from day to day, is, to the observant and interested practitioner, little less than a divine inspiration. Before his eyes he beholds and in his heart he feels, the workings of a higher power akin to creative wisdom making something out of nothing! Could there be a nobler work?

If heretofore there has been no state aid of any class, and our legislators had, for the first time decided to embark in such laudable work, it looks as though, from our present point of view, that the crippled children should be among the first to receive attention; that they should have been neglected all these years is a charity conundrum to be answered by some practical "*Ohio Idea*."

Abstracts and Extracts.

ANTITOXIN AND INTUBATION IN THE TREATMENT OF LARYNGEAL DIPHTHERIA, WITH A SUMMARY OF 230 OPERATIONS.

Burt Russell Shurly (*New York Medical Journal*, No. 1180) computes his present mortality in cases of diphtheria of the larynx treated by antitoxin and intubation combined as 6 2-3 per cent. In his first 200 operations, however, he had 51 deaths. In addition to these two resources he makes use of occasional emesis (mechanically produced), the steam-tent, a calomel purge, an ice collar, saline infusion (rectal) with strychnia and alcohol as stimulants.

The ignorant foreign element in large cities, who formerly antagonized the practice of intubation, now demand its performance. It is unfortunate that we have not a larger number of skilled operators, as skill and experience are essential to success. Practitioners may render themselves expert by practice upon the cadaver of a child, or an anesthetized dog.

In regard to indications, a tonsillar exudate with laryngitis in a child not over eight years of age should be construed as a case of laryngeal diphtheria. Antitoxin to the amount of 1,500 units should be injected at once and repeated in from six to twelve hours, and the probability is that surgical intervention will not be needed. If the antitoxin does not, for any reason, dispel the dyspnea within reasonable time, the age of the patient may determine whether or not to proceed at once to intubation. While the case of an older child may be left to itself for a time, we should not delay if the patient is under three years of age, and we should not postpone intervention in any case beyond the period of extraordinary respiration.—*Arch. of Ped.*

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FOOD VALUE AND DIGESTIBILITY OF THE BANANA.

In a communication to *Domestic Science Monthly*, Aug. F. Knudson contradicts certain statements that have been going the rounds of the medical journals for some months past. He says: "All I know about the banana is mostly my own personal experience. I know that Von Humboldt calls it the most nutritious of all foods, and the most productive, area for area, of all man's foodstuffs. I know by experience that one can live on ripe, uncooked bananas for an indefinite period. I have lived on them for weeks at a time and was perfectly nourished.

"In India the banana is looked upon as one of the best foods that can be wished; and in the Hawaiian Islands it used to be con-

sidered the most nourishing and the best food for women in delicate health. My own experience is that it is a very easily assimilated food.

"One strange feature is that any alcohol in the stomach causes a very rapid fermentation, and almost poisons the unfortunate drinker. This accounts for the universal bad name the banana has in India, Singapore and other tropical countries where there is so much liquor consumed. The chemical reason for the change I do not know, but I think it is a universal fact."—*Diet. and Hyg. Gaz.*

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THE MIXED TUMORS OF THE LOWER UROGENITAL TRACT OF CHILDREN.

The theory generally attributed to Cohnheim, but which was first advanced by Durante, as to the origin of malignant growths during fetal life by bits of epithelium being nipped off and included in connective tissue, has been gradually abandoned by most recent writers. A recent inaugural dissertation, *Die Mischgeschwulste am unteren ende des Urogenitalapparates der Kinder*, from the pathologic institute of the University of Giessen, by an American student, Dr. J. Edwin Sweet, gives an exhaustive study of a mixed tumor of the vagina, with the result of a study of the literature on the subject of the mixed tumors of the lower end of the urogenital tract in children. He was able to collect information about twenty-two tumors of the prostate, and forty-five tumors of the bladder. These tumors for the most part were reported as sarcomas, but Sweet finds considerable evidence that they belong to the group of mixed tumors, and he inclines to the belief that they arose as fetal inclusions. He finds that the age of the patients at which these tumors develop is about the same in all, but the tumors of the prostate and of the bladder have a greater tendency to produce unfavorable symptoms because of their greater tendency to interfere with the urinary apparatus, and because of their greater malignancy. The primary seat of all the tumors of the bladder was at the base of the bladder, some of them about the internal opening of the urethra, others about the openings of the ureters. Metastases were not present in any case. The seat of these tumors, exclusively at the base of the bladder, he considers evidence that they could not be made up of the normal tissues of the bladder wall, for in no case were they found where only bladder-wall tissue was present. The tumors were about equally common in both sexes. Recently, Wilms, of

Leipzig, has also carefully studied another group of mixed tumors of the kidney, vagina, and cervix uteri, *Die Mischgeschwülste* (Leipzig, 1899-1900), and he was also of the opinion that these congenital tumors may arise from fetal inclusions. The opposition to Cohnheim's theory has been mainly from those engaged in studying carcinoma. Possibly a different conclusion may be reached by those who undertake a study of sarcoma and other forms of new growths.—*American Medicine*.

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Dr. Jaboulay (*La Sem. med.* XXI, No. 9) reported a year ago on the good results obtained by the hypodermic use of quinine in malignant tumors. Since then the author discovered that quinine taken by mouth exercises the same beneficial influence. He gives 16 grn. daily, interrupting this medication for two days in a week, to avoid intoxication, giving Fowler's solution during this interval. Vaginal and rectal injections of quinine have also been tried, without success, however. On the other hand, the external application of a 10 per cent. quinine ointment to cancerous ulcerations is warmly recommended.—*Merck's Archives*.

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In a recent investigation of the comparative value of some of the newer hypnotics at the New Hampshire State Hospital at Concord, the following report was made by the investigator in regard to Chloretone:

"This drug seems to have a selective action upon nervous tissue, and it is in this way that it produces its hypnotic effect. It lulls to inactivity both motor and sensory cells, but the latter would seem to be sooner and more gravely affected than the former. By thus relieving any bodily pain and cutting off the many influences of the surroundings which tend to stimulate sensory reflexes, chloretone isolates the mind, so to speak, from its disturbing influences, and a dreamless sleep is soon induced.

"We have tabulated the results of our observations in 71 instances, in which the effect of this drug was studied. To be efficacious a considerably larger dose was necessary than is generally recommended. Thus small doses of 0.3 to 1 Gm. (5 to 15 grn.) had to be repeated several times in order to induce sleep. Finally it was found best in our patients to commence with a 1.3 to 1.6 Gm. dose (20 to 25 grn.) and repeat it once or twice, if necessary, at hour intervals. The largest dose given was about 5 Gm. (75 grn.) within an hour and a quarter. In 18.3 per cent. of cases sleep followed within fifteen minutes after administering the drug,

though some of these cases had had previous doses that had been ineffectual. In 29.5 per cent. sleep followed in from fifteen to thirty minutes. So that in nearly 48 per cent. of the cases sleep was induced within the first half hour. In nearly one-quarter of the cases (23.9 per cent.) three or four doses had to be given before sleep was produced. The average time of all cases between the last dose and the time when they first dropped to sleep was forty-eight minutes."—*Boston Med. and Surg. Jour.*, July 18, 1901.

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Dr. Joseph Carne Ross (*Brit. Med. Jour.*) considers cinnamon a specific in influenza, if the treatment is commenced early enough. He says that if the cinnamon is administered within about twenty hours from the manifestation of the first symptom, the patient will be able to resume his vocation in three to four days. The earlier treatment is commenced, the earlier will complete convalescence be established. He has used the treatment during the past eight or nine years. At first he used a decoction of cinnamon, but now he uses the drug in tablet form. The treatment must be commenced as early as possible, as a delay of over twenty-four hours renders the treatment inefficacious.—*Merck's Archives*.

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The use of sodium salicylate (*Claffin's Druggist*) in the treatment of diabetes is not quite a novelty; in fact, its employment in the iritis of diabetics has been recommended by a number of writers. It is doubtful, however, if physicians in general look upon the drug as capable of fulfilling so many indications incident to the disease as are brought forward by Dr. Litten (*Therapiedier Gegenwart*, 1899, No. 3; *Deutsche Aerzte-Zeitung*, September 15th). He describes a tablespoonful of a 4 per cent. solution, to be taken every two or three hours, and says that larger doses are quite unnecessary. He finds that under the salicylate treatment the proportion of sugar in the urine sinks from 1 to 2 per cent. almost always, but it is against a large number of the "nervous" complications that the drug is mainly useful. Especially brilliant, says Dr. Litten, is its action in allaying the itching of diabetics and even in causing the subsidence of the weeping eczema that is apt to follow, although occasionally preparations of tar prove efficient when the salicylate has failed. In neuralgic complications, such as sciatica, intercostal neuralgia, and zoster, the drug often proves highly efficient.

The author dwells particularly on the virtues of sodium salicylate in decreasing the amount of urine secreted and abating the thirst, both of which symptoms he interprets as of nervous origin. This action of the salicylate, he says, is extraordinary in many cases. He cites the case of a child that had become very much reduced in the course of pronounced diabetes mellitus. A strict meat diet had had no effect on either the excretion of sugar, the distressing pruritus, the unquenchable thirst, or the enormous flow of urine. A teaspoonful of the solution given every three hours worked like a charm in relieving the itching, the thirst, and the polyuria, while the amount of sugar in the urine fell from five to less than three per cent. and the insatiable appetite was reduced. It will be seen that Dr. Litten does not allege that sodium salicylate is to be regarded as curative of so serious a disease as diabetes mellitus, but if his experience with it as a palliative proves to be that of most physicians who employ it in the treatment of that disease, a decided advance will have been made in the effort to prolong the lives of diabetics and to relieve them of much of their distress.—*Pub. Health Jour.*, September, 1901.

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THE USE OF MASSAGE, EARLY MOVEMENTS, AND POSTURE IN THE TREATMENT OF RECENT FRACTURES.

Dr. Sir William Bennett states (*The Practitioner*, August, 1901.) that a prolonged experience of the use of the combined methods of massage, early movements, and rational posture in the treatment of ordinary fractures coming under notice almost daily in hospital work, leads to the following conclusions:

1. When managed with ordinary discretion and with average dexterity the result of the method is undoubtedly advantageous, inasmuch as the time elapsing before the patient is able to resume his ordinary vocation is diminished by at least one-third, partly by the increased rapidity of union which ensues and to a great extent by the avoidance of the waste of time which occurs in correcting the stiffness and pain which so often follow upon the discontinuance of splints, in the majority of cases, treated by means of the classical method of prolonged splinting, etc.

2. The advantages resulting from early passive movements—an essential precursor of which is massage—are especially noteworthy, a fact which was fully elicited in an inquiry made by the present writer in connection with a communication read at the meeting of the British Medical Association at Ipswich in 1900,

the evidence obtained proving conclusively that early passive movement is followed by a correspondingly early return to the ordinary vocation of the patient.

3. The benefit of the method is remarkably demonstrated in fractures in which the chances of union are practically *nil*—*c. g.*, intra-capsular fracture of the neck of the thigh-bone—the indications being to obtain the best use in the damaged limb by insuring free movement and by preventing the wasting of muscles concerned; in such cases massage and passive movement are indicated at once.

4. The danger of thrombosis and embolism feared by some surgeons does not exist more than in fractures treated by prolonged splinting. Cases of embolism may have occurred in the course of treatment upon the lines under consideration, but the writer, whose experience of the method is probably larger than that of any other surgeon in this country (England) has met with no such case, although he has seen three instances of embolism (one fatal) in fractures managed by prolonged splinting. Thrombosis and embolism will from time to time occur in fractures however treated, a fact of which any surgeon of large experience must be painfully aware.

5. The method is not suited to those who lack discretion or who are defective in dexterity—a remark which applies with equal force to the majority of surgical methods; to such the classical treatment by prolonged splinting, whatever its disadvantages may be, is better adapted.

6. The principal disabilities attaching to the union of fractures in faulty positions, unless the displacement be gross or of the rotary kind, are avoidable by the use of massage and early movements, by which adhesions around the fracture are avoided.

7. The method is not to be regarded as a substitute for treatment by splints on the one hand or by operative measures on the other, but should be used as a rational adjunct to each.—*The Post-Graduate, September, 1901.*

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CATTLE DISEASE.

Reports do not indicate (*Amer. Med.*) that there is any diminution in the extent of foot-and-mouth disease which has prevailed in almost every country in Europe for the last three years, and the United States government is refusing to admit cattle, sheep, or swine, except from the British Isles. As a result of negotiations between Secretary of Agriculture Wilson and the

Canadian minister of agriculture an agreement has been reached between the administrations by which Canada is to have a first-class veterinarian stationed in England to test for tuberculosis all British cattle shipped to this country via Canada. The Canadian government wanted all cattle admitted from Canada without tests at the border by American experts. To this the department at Washington would not agree. It is officially stated that about 10 per cent. of live stock in the United States and about 40 per cent. in Great Britain have tuberculosis.—*West. Med. Rev.*, Sept. 16, 1901.

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A RARE CASE OF SUDDEN DEATH.

Musgrove says: I wish to put on record a case of very sudden death of a man about 33 years old, who had never been sick to speak of in his life. He was as perfect a specimen of physical manhood as could be found anywhere.

He complained of a pain in his chest the day before he died, and had nose bleed two days before he died. He slept well the night before he died. He awoke about 5 o'clock in the morning and on moving complained of a severe pain in his chest. A doctor, living next door, was at his bedside in less than five minutes and found him dead. Only two futile attempts at respiration were observed by the doctor after his arrival.

A post-mortem revealed the cause of death to be the erosion of a vein—the vena innominata of the right side—by a calcified bronchial gland. There were several of such glands in the vicinity of the bifurcation of the trachea.

I report this case that other physicians may, in case of sudden death, know that heart disease is not always the cause. This man's heart was perfectly normal.—*Medical Sentinel*.

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ROENTGEN RAYS IN MAMMARY CANCER.

Andrew Clark (*British Medical Journal*) reports remarkable improvement made in a case of mammary cancer treated with the X-ray. The patient was a woman of 60. The disease affected the right breast, which presented an almost entirely red ulcerating surface with a hard margin, the whole being firmly fixed to the pectoral muscles and underlying ribs. The mass extended to the axilla, in which were several indurated glands. The woman had refused operation seven years before, so that the disease was of several years' duration. On March 6, 1901, treatment was begun. In eight days there was a very decided improvement.

The surface became cleaner, epithelium appeared, pain diminished, the mass decreased in size, the axillary glands grew smaller and the general health was well improved.—*West. Med. Rev.*, Sept. 16, 1901.

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Sometimes in children the subjects of tracheotomy, and who have been compelled to wear the tube a long while, it seems very difficult to get them in the habit of using their larynx again. A nervous dread of being without the tube has much to do with this condition. In such cases the surgeon may try occlusion of the tube with a cork, without removing the instrument, and persevering efforts must be made to get the child to talk or to blow a cheap trumpet, or to blow out a candle.—*International Journal of Surgery*.

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FURTHER OPPOSITION TO CHRISTIAN SCIENCE.

The *Boston Med. and Surg. Jour.* says that an elderly man who has been living during the winter in a tent in an outlying portion of Boston, presumably for the treatment of tuberculosis, is said to be gaining adherents to his doctrines, whatever these may be. If the following statement for a daily paper be true, they are, at least, sound in certain details: "At the same time with consumptives he wishes to treat people suffering from any disease which Christian Science has tried to cure and failed. He will take any such case (providing it is not surgical or contagious) and produce, by purely scientific methods, the same results that Christian Science sometimes produces; in other words, he will cure without medicine and without faith. He believes that Christian Science is spreading too rapidly, not only in this country, but also abroad, and that its influence is pernicious, particularly in the disregard of contagious disease and the blessings of antitoxin, which it teaches. Therefore, he says that he wishes to disprove its theories by cold scientific proof."—*West. Med. Rev.*, Sept. 16, 1901.

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VESICAL IRRITABILITY AND PAIN FOLLOWING MODERATE DOSES OF QUININE.

J. D., male, aged 30 years, consulted me on February 17th, 1901, for what he called "a bearing-down sensation in the lower part of the abdomen." On questioning him, I found that the uncomfortable feeling he complained of was a sense of weight and pain over the hypogastric region, relieved temporarily by empty-

ing the bladder; and that there was slightly increased frequency of micturition. He had always been in good health with the exception of an attack of grippe seven years before, and was just recovering from a slight attack of the same disease. He attributed his symptoms to the grippe, as he had suffered in a similar way after the first attack. He had had a mild attack of gonorrhea one year after the first attack of grippe.

Inquiry as to how he had been treated, revealed the fact that he had been given quinine on both occasions; he could not say how much during the first attack, but in two days had taken twenty-four grains for the last attack. He remembered distinctly that the physician who treated him for the first attack had told him that he could not find any cause for the symptoms complained of, and he had then consulted a second, but without receiving much benefit, although a most careful examination had been made and his bladder washed out. The condition had gradually improved, and disappeared completely in three or four weeks. He was quite positive that he had never taken any quinine between the two attacks, as he had never had a day's illness.

I think there can be no doubt that this was a case of vesical irritation from quinine, even though the amount taken was not large. It is well known that some persons show a special idiosyncrasy to the action of quinine, most of the cases of severe cutaneous lesions following its administration having been caused by relatively small doses. Then, too, irritation of the urinary tract is recognized as an occasional untoward effect, instances having been recorded in which a condition resembling acute nephritis resulted from moderate doses of quinine.—*Montreal Med. Jour.*, August, 1901.

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SOME EXPERIENCES WITH THE SCHLEICH MIXTURE

P. Hyn (*Klin. therap. Woch.*, July 20, 1900) has employed the Schleich solutions in 135 cases, and is well satisfied with the results. All disagreeable symptoms of ether narcosis, such as salivation and bronchitis, were but rarely noticed, and as long as respiration was active, sudden death, which is liable to occur after chloroform administration, seemed to be impossible. Depending upon the age, from 0.98 to 2.70 cubic centimeters of the mixture were found necessary per minute to keep the patients under. Excitation was noticed in twenty-five cases, nausea in nineteen, convulsive movements in three, trismus in two, and temporary cessation of respiration in two, one of which was an extremely weak

child suffering from post-scarlatinal osteomyelitis. Respiration becomes more frequent and deep, and is most rapid when complete narcosis has set in, unless dyspnea is present, when an increased rate is not observed. There seems to be a close association between the degree to which the patient is anesthetized and the number of respirations, for when the patient is allowed to come out the normal rate gradually returns. The pulse is full and not rapid; as consciousness returns it becomes more frequent and weak. The author believes that, owing to the physical properties of the mixture, one can regulate the amount within perfectly safe limits by carefully and constantly watching the respiration and circulation.—*New York Medical News*.

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CEREBRAL ABSCESS SECONDARY TO TYPHOID.

A. C. Brown (*Edinb. Med. Jour.*) reports a case which is interesting on account of its etiology, the difficulties in the way of diagnosis, and the success of the treatment. No instance has yet been recorded in which pyogenic organisms gaining access to the circulation from the intestinal ulcerations of typhoid have been deposited in the brain with the production of a suppurative focus. In this case the patient, a girl of nineteen, developed the symptoms of Jacksonian epilepsy shortly after discharge from the hospital, where she had been treated for a moderately severe attack of typhoid fever. The nervous disturbances were purely motor in character, sensory symptoms and cerebral derangement being entirely absent, so that the focal lesion could be definitely located in the right Rolandic area, as the convulsions affected the left arm and leg. The nature of the lesion was more difficult to determine; functional disturbance of the cerebral centers, abscess, tubercle, and syphilis were one by one considered and rejected. Against abscess were the position of the lesion, the absence of any exciting cause or rise of temperature (a blood examination was not made), and a provisional diagnosis of a rapidly growing gliomatous tumor was made. On operation, however, the error was recognized and three ounces of pus evacuated, after which the patient made a complete and uneventful recovery.—*Medical News*.

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TRANSPLANTATION OF URETERS INTO RECTUM BY AN EXTRAPERITONEAL METHOD FOR EXSTROPHY OF BLADDER.

George A. Peters (*Brit. Med. Jour.*, June 22, 1901) says: The transplantation of the ureters into the rectum would appear

to hold out hopes of results highly preferable in those cases which survive, but unfortunately the mortality hitherto has been high. The deaths are due either to peritonitis or ascending pyelonephritis, but with increasing knowledge of technique there is hope that the death rate may yet be greatly diminished. If by thus converting the rectum into a cloaca the patient can hold his urine even from one to three or five hours, he is surely in a much better position to take his part in life than he could possibly be with the best apology for a bladder that can be expected to result from any flap operation.

History of a case: On July 15, 1899, the patient was anesthetized, and the parts were disinfected as thoroughly as possible. The sphincter was well stretched, and the rectum, having been previously cleansed by a purge and enema, was washed out with an antiseptic solution of non-poisonous strength. A fair-sized sponge to which a tape was attached was then passed into the rectum as high up as possible. This not only prevented any passage of fecal matter but assisted materially in raising the anterior wall of the rectum towards the bladder. Turning now to the bladder, a Jacques soft rubber catheter about No. 5 (English) was passed for about two inches into each ureter. The part containing the eye was cut off so that the urine entered the opening upon the end of the catheter freely. A silk suture was then "caught" through the extreme end of the ureteral papilla once or twice and was also passed by a needle through the substance of the catheter so as to effectually prevent its slipping out, as it was the intention to retain these catheters in position at least forty-eight hours. Care was observed not to obstruct the lumen by passing the thread across it or by tying too tightly. The distal end of the ureter with a goodly rosette of bladder muscle and mucous membrane was then dissected free, the catheter affording an excellent guide to its position. The idea was that whatever virtue there might be in the peculiar termination of the ureter upon the inner surface of the bladder should be retained when the transplantation was completed. As soon as the entire thickness of the bladder (which is here uncovered by peritoneum) has been snipped through with scissors or scalpel, blunt dissection may be employed, and it will be found not to be difficult to free the lower end of the ureter along the wall of the pelvis without injury to the peritoneum.

Both ureters having been isolated the whole of the bladder tissue was remorselessly ablated, from the perimeter, where it merged

into the skin, to the prostate where the vesiculæ seminales debouched. (During this dissection great care must be taken not to expose or injure the peritoneum; and if its hazardous proximity be suspected, a portion of the bladder muscle may be left, though every vestige of its mucous membrane must be removed. In my case the peritoneum gave no trouble whatever and was never in the least jeopardized).

The next step was to expose the lateral aspects of the rectum at a point below the reflection of the peritoneum. The deep dissection was found to be surprisingly easy.

The final step of the operation was the implantation of the ureters into the lateral walls of the rectum and this was accomplished in the following manner:

With his finger in the rectum the operator carefully determines the exact point at which the implantation is to be made. The requisite qualifications are: (1) It must be above the internal sphincter; (2) it must be in the lateral and not in the anterior wall, so as to avoid kinking (this actually occurred in the first instance in the author's case, necessitating a subsequent adjustment of the implantation); (3) it must be high enough up to permit the ureter to project slightly (say $\frac{1}{4}$ to $\frac{1}{2}$ inch) into the lumen of the bowel without stretching. If the ureter thus projects it forms a papilla, which when pressed upon from within the bowel becomes converted into a valve similar to that at the entrance to the bile duct and the salivary ducts. This point having been decided upon, the operator or his assistant passes a slender forceps through the anus, presses them against it from the rectal aspect and lifts it carefully into the anterior wound. The wall of the bowel is now incised upon the projecting forceps which are then forced gently through. By stretching and cutting the wound is enlarged with great exactness, so that the ureter with its contained catheter will accurately fill it and yet not be injuriously pressed upon. The forceps are now opened, made to grasp the distal end of the catheter and withdrawn into the bowel and out of the anus, the operator at the same time carefully directing the ureter through the slit, and satisfying himself that its termination forms a papilla at least $\frac{1}{4}$ inch long upon the rectal mucous surface. In guiding the mouth of the ureter through the slit in the rectal wall forceps may be passed back again beside the catheter and made to grasp the edge of the rosette of bladder tissue around the ureteral papilla. This process is repeated again upon the other side. The sponge plug is now withdrawn, care being taken not to disturb the catheter while doing so.

There seems to be no necessity whatever for stitching the ureters in position.

The whole area to be healed will be found surprisingly small, and a firm packing with iodoform gauze will afford sufficient drainage and at the same time furnish a support and splint to the delicate ureters in their new position. When the implantation has healed securely and granulation has been established, a plastic closure may be done if it be deemed advisable.

Present condition of the patient, December, 1900: It is now one and a half years since the rectum was converted into a cloaca by the transplantation of the ureters. The boy is to-day in perfect health. There is no evidence whatever of a disturbance of the functions of the kidneys. On examination per rectum the mouth of each ureter can be felt as a salient papilla as large as the tip of one's little finger.—*Pediatrics*, Sept. 15, 1901.

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THE LAY PRESS AS AN EDUCATIONAL FACTOR IN THINGS PERTAINING TO THE PUBLIC HEALTH.

Since Dr. Koch's address before the British Congress the daily papers have been teeming with various and sundry reports in reference to it. The statement that tuberculosis is not transmissible through the agency of heredity—a fact fairly well established among the profession for several years—has been voiced from the editorial house-tops as a discovery announced for the first time in medicine. Naturally, the text of Dr. Koch's address has been garbled, but a great deal that is true has reached the public ear, and much good will accrue from its publication.

That the laity are woefully ignorant of things medical there can be no doubt. That this ignorance has been much enhanced by the publication of ridiculously perverted reports of things pertaining to medicine in the daily newspapers there can be equally no doubt. As an educational agent the newspaper is a potent factor for good or bad. Had the lay press announced years ago that tuberculosis was contagious, and that the sputum of tuberculous patients was the active agent in disseminating the disease, its eradication would have become much simplified and advanced with the education of the masses.

Not far in the rear of the dread "white curse" there stalks another enemy to the public health—syphilis. The laity account it a purely venereal disease, and speak of it only behind closed doors. The press adds to this impression by whispering it to its readers as "blood poison" or "a loathsome disease," covertly hint-

ing at its venereal origin. Yet how frequently does the physician meet with the extragenital form of chancre! And in the vast majority of such instances, on account of the view-point of the laity on syphilis, all but the patient himself remain ignorant of the character of the sore, a course of action that exposes countless numbers of innocent persons to the contagion.

The progress of medical and sanitary science has been impeded for ages by the ignorance of those outside of the profession. The lay press has afforded but little aid to scientific advancement, when it is in a position to do much. We feel that this lack of assistance is due in a great measure to a pardonable dearth of knowledge on matters contained in the province of medical science on the part of those engaged in editing the daily newspaper, and we would respectfully offer the suggestion that each paper retain on its staff a competent medical editor or censor, whose duty it will be to give the people the truth on matters pertaining to the public health.—*Am. Pract. and News.*

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BOTTINI OPERATION FOR THE RADICAL RELIEF OF PROSTATIC
OBSTRUCTION.

L. Bolten Bangs (*Medical Record*, March 9, 1901,) expresses the opinion that enlargement of the prostate is not a senile condition; that while its effects may not show themselves till mid-life or later, it really begins in early life. He thinks that the premonitory symptoms of this malady, to which so little attention is paid by the patients, should be notes of warning to him to seek early advice, for if radical measures are necessary, the earlier this is known the better it will be for the patient. Regardful of the fact that surgical interference with the prostate is a serious matter at all times, and especially after the pathological changes due to hypertrophy have taken place, he has been conservative in his treatment of prostatic cases, operating only on those cases that imperatively required it. After three years' experience with the improved Bottini operation, he reports the results obtained in thirty-six cases. He is convinced from his experience in these cases, that while the operation is a serious one we have in it the means by which the sufferings of prostatics may be ameliorated—in some cases even cured—without submitting them to the graver dangers of prostatectomy. He says that the operation requires skill for its successful performance; that the patient should be as carefully prepared for it as for any other serious operation; and that in the majority of cases the operation should be performed

under general anesthesia, as it is best done slowly, thus lessening the chance of secondary hemorrhage. Of the thirty-six cases there were four deaths, two of which were directly attributable to the operation. Sixty per cent. of the cases are reported as cured, twenty per cent. as very much improved, and twenty per cent as not benefited.—*Courier of Medicine*.

* * *

THE VALUE OF WIDAL'S SERUM REACTION IN THE DIAGNOSIS OF
TYPHOID FEVER IN CHILDREN.

J. H. Thurston, in the *British Med. Jour.*, Sept. 7, 1901, states that of forty-two cases of typhoid fever in children all gave a positive reaction; forty on admission to the hospital, and only one gave negative results later than the first week of illness. Many other cases were examined where typhoid was not suspected, but to avoid the possibility of overlooking a case. All gave negative results. As a result of his work, he has reached the following conclusions: (1) In children's disease a positive Widal reaction is trustworthy evidence of the presence of typhoid fever; (2) a negative reaction later than the tenth day of an illness is strong, but not absolutely convincing evidence of the absence of typhoid fever; (3) repeated negative reactions are trustworthy evidence that the disease is not typhoid at all.

The technics employed was quite different from the usual methods for making the test. The patient's blood was received in a small sterile pipette and diluted with an equal quantity of sterile broth. To one platinum loopful of this diluted serum, fifteen loopfuls of a broth culture of the typhoid bacillus were added on a cover-glass, making the dilution one in thirty. Various examinations were made for an hour and if at the end of that time there was no clumping, the reaction was considered negative.—*N. Y. Med. Jour.*, Sept. 21, 1901.

* * *

The *British Med. Jour.* for Sept. 7, 1901, contains a report of "Two Cases of Chronic Hydrocephalus in Infants Treated by Tapping and by the Introduction of Aseptic Air in the Place of the Fluid," by William Ewart, M. D., F. R. C. P., and W. Lee Dickinson, M. D., F. R. C. P. In one of the cases reported, the tapping was done eight times in six months, from nineteen to fifty ounces of fluid being withdrawn each time. No very serious symptoms occurred at any time, and at the end of the period the condition of the child was considerably improved. In the second case the operation produced such marked improvement that it was not repeated.—*N. Y. Med. Jour.*, Sept. 21, 1901.

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Editorial.

A WORD ON THE JURY.

Some months ago we had occasion to call attention, in the columns of the GAZETTE, to the criminal action of a jurymen, while sitting upon a case of alleged mal-practice, in this city.

Recently, in Cleveland, a member of the *grand jury* was found guilty of intoxication and consequent absence from duty.

This necessitated the impanneling of a new jury, and incidentally an additional expense to the community. The jurymen was very properly punished, the court indulgently dismissing him with a fine of fifty dollars and costs.

In the former case—one of attempted extortion of money from the defendant—a far graver offense against justice, it seems to us, and coming, as it did, from a man in the full enjoyment of his senses, the court merely discharged him from further duty.

In this case also another jury and additional trial, with attendant expense, was necessary, but here the injustice was borne entirely by an individual.

Is it not high time that the men selected for jury duty, and especially for duty which can be intelligently fulfilled only by the possession of some knowledge, appreciation and understanding of technical subjects, have some worthier intellectual and moral qualifications to recommend them than those usually enjoyed by the social parasites, hangers-on and loafers about political headquarters?

A good many such men seem by some "chance" to be selected for jury duty, and we believe that such an open door policy is both unjust and unnecessary.

We exercise some care and discrimination in the selection of our judges, yet in the appointment of our juries, upon whom rests the final judgment, we are notoriously careless. Is it right?

THE CASE OF PRESIDENT McKINLEY.

At the very moment of our going to press last week, which had been delayed in order that we might give our readers as complete an account as possible of the late President's case, we were able to prefix to our special correspondent's narrative a brief dispatch from Buffalo announcing the onset of alarming symptoms and closing with the statement: "The situation is most grave." It was impossible, however, to change the hopeful tone of our editorial article on the case, a tone that was based on the bulletins issued by those of our professional brethren who were in attendance. They were perfectly frank in their statements, and it is evident that they were unanimous as to the prognosis; otherwise they would not all have signed the bulletins and above all, they would not have allowed Colonel Roosevelt to leave Buffalo. So far as the facts in the case were then known to them, they were, we think, warranted in expecting the recovery of their illustrious patient; the deplorable outcome of the case reflects not in the least upon their skill or judgment, but serves only as a sad illustration of the limitations of our knowledge. Medicine and surgery have made wonderful advances within recent years, but they have not

yet reached mathematical precision. It is a melancholy consolation to know that the fatal termination of President McKinley's case was not in the slightest degree due to any omission to give him the full benefit of all the present resources of our art; and there is nothing humiliating in the fact that the favorable prognosis which for five or six days seemed justified should have finally proved fallacious.

It is expected that an "official" report of the case will be given to the profession in the course of a short time. Pending the issue of the report, let us briefly review the case. At the time of his assassination, President McKinley was probably in better physical condition than most men of his age, fifty-eight years, who lead a sedentary life. So far as is known, he was free from all organic disease, though his vitality may have been somewhat impaired by the fearful mental strain to which the duties of his office and its responsibilities and anxieties had long subjected him. He was suddenly cut down by a cruel wound, but he bore it bravely and there was little of the condition known as shock. This freedom from shock was correctly interpreted as showing that no considerable internal hemorrhage was going on. Without delay he was taken to a well-equipped hospital and attended by surgeons of world-wide reputation and vast experience. The operation itself was performed by an exceedingly capable gynecologist, who was assisted by exceedingly capable general surgeons. It is perfectly certain that there was no technical fault in the operation, and it may be said with equal positiveness that it would have verged on madness to prolong the search for the bullet after it had been ascertained that it had not inflicted any very grave injury beyond that of the stomach—ascertained, that is to say, within the limitations of warrantable efforts. The amount of time consumed in a major operation, especially one dealing with the abdominal organs, is of vast importance as affecting the patient's chances of recovery; other things being equal, a short operation promises much better results than a prolonged one, for every minute of exposure of the viscera to the air and of their subjection to manipulation detracts from the probability of the patient's ultimate recovery.

The operation having been finished without seriously taxing the distinguished patient's vital powers, there followed at least five days of freedom from serious symptoms. This we say with full appreciation of the fact that the record of the pulse and respiration seemed ominous, for the high rate might have been due to any one of a number of conditions not in themselves of grave import. The

hopeful view was taken, and quite naturally, that it could be so explained. It is easy to be wise after the event, and to say that in this respect the surgeons were in error; err they certainly did, as the result shows, but to err in such a way argues no incapacity or avoidable lack of judgment—it simply, we repeat, illustrates the fact that the medical man is not a perfect being.

The newspapers have taken great pains to give accurate reports of the progress of the case, and it is a source of very great satisfaction to us to be able to say that, even since the fatal termination, their comments have in remarkably few instances been reproachful. Still, the accounts given to the public this week rather tend to create the impression that there is essential disagreement among the surgeons as to the real cause of the sad ending of the case. We do not think that any such disagreement really exists. With every desire to report a medical man correctly, the interviewer may innocently fall into misrepresentation. For instance, one of the surgeons has been represented as expressing the belief that the bullet was “poisoned.” Now, whatever that gentleman may have said, we do not believe that he intended to convey the idea that a gross poison had been smeared over it or incorporated in its substance. It is not at all improbable that there were pathogenic bacteria on the surface of the missile, but so there often are on every ordinary material used by man. We know of no “poison,” in the ordinary acceptation of the word, that in only such minute amount as could be smeared on a bullet—or in any amount, for that matter—could, when driven into the body, set up gangrene after at least five days of inoffensiveness.

Then, too, another of the surgeons is reported as attributing the gangrene to the baleful effect of the pancreatic “juices,” he affirming that the pancreas was wounded, whereas Dr. Mann, who performed the operation, says distinctly that that organ was not wounded. By contiguity to a mass of gangrenous tissue an organ may well take on a gangrenous condition without having itself been originally injured, even by contusion, and the “juices” which it might then pour forth to inoculate other structures would be the ichorous discharge from its necrotic surface rather than its physiological secretion, although we can well understand that the pancreatic secretion itself is not innocuous. The idea of intestinal toxæmia, which appears to have been entertained for a time as accounting for the earlier of the unfavorable symptoms, was natural, but such a condition could hardly have given rise to grave

alarm, for toxaemia of enteric origin is rarely the cause of more serious results than transitory functional disturbances.

Gangrene was probably established two or three days before the fatal issue followed, but it could hardly have occurred very early without giving rise to more disquieting phenomena than augmentation of the pulse and respiration rates, which, as we have said before, might well have been due to some comparatively unimportant disturbance. To the wound of the kidney we attribute little importance further than arises from the fact that it made one more traumatic surface to become gangrenous. There is said to have been a trifling degree of hematuria of brief duration, but not enough to indicate a very serious renal lesion.

The case of the profoundly lamented President may be set down as unique in some of its features, not so much perhaps as regards the actual traumatism inflicted by the assassin's bullet as with regard to the deferred appearance of the gangrenous process that blotted out his fair prospects of recovery. The profession eagerly awaits the appearance of the authoritative statement which, it is understood, his surgeons are soon to issue, but undue haste should not be allowed to interfere with the thoroughness of the document.—*N. Y. Med. Jour.*

THE ARMY MEDICAL CORPS.

We are in receipt of a letter from the Surgeon General of the U. S. army requesting that we publish the circular of information gotten up for the benefit of candidates for appointment to the medical corps. For the benefit of those who are desirous of entering upon an army career we take pleasure in publishing it entire.

CIRCULAR OF INFORMATION FOR CANDIDATES SEEKING APPOINTMENT IN THE MEDICAL CORPS OF THE UNITED STATES ARMY.

The medical corps of the army, as increased from a total of 192 to 321 medical officers by recent congressional action, consists of a surgeon general with the rank of brigadier general, eight assistant surgeons general with the rank of colonel, 12 deputy surgeons general with the rank of lieutenant colonel, 60 surgeons with the rank of major, and 240 assistant surgeons with the rank of first lieutenant, mounted, for the first five years, and the rank of captain, mounted, thereafter, until promoted to major.

Section 1172 Revised Statutes of the United States, provides that "No person shall receive the appointment of assistant surgeon

unless he shall have been examined and approved by an army medical board, consisting of three surgeons or assistant surgeons, designated by the Secretary of War; and no person shall receive the appointment of surgeon unless he shall have served at least five years as an assistant surgeon in the regular army, and shall have been examined and approved by an army medical board, consisting of not less than three surgeons, designated as aforesaid." The act to increase the efficiency of the military establishment of the United States, recently approved, further provides "That the period during which any assistant surgeon shall have served as a surgeon or assistant surgeon in the volunteer army during the war with Spain or since shall be counted as a portion of the five years' service required to entitle him to the rank of captain.

All vacancies are filled by appointment to the junior grade (first lieutenant). Promotion through the intermediate grades of rank from that of captain to that of colonel is by seniority, but there is an examination for the rank of captain and another for that of major, to ascertain the fitness of the officer for promotion. Advancement to lieutenant colonel and colonel takes place without further examination. The surgeon general is selected by the president from among the members of the corps.

PAY AND EMOLUMENTS.

To each rank is attached a fixed annual salary, which is received in monthly payments, and this is increased by 10 per cent. for each period of five years' service until a maximum of 40 per cent. is reached. An assistant surgeon with the rank of first lieutenant, mounted, receives \$1,600 per annum, or \$133.33 monthly. At the end of five years he is promoted to captain and receives \$2,000 a year, which, with the increase of 10 per cent for five years' service, is \$2,200, or \$183.33 per month. After ten years' service as captain the pay would be \$2,400 annually or \$200 per month. The pay attached to the rank of major is \$2,500 a year, which, with 10 per cent. added for each five years' service, becomes \$3,000 after 10 years' service, \$3,250 after fifteen years and \$3,500 after twenty years. The monthly pay of lieutenant colonel, colonel, and brigadier general is \$333.33, \$375, and \$458.33 respectively. Officers in addition to their pay proper are furnished with a liberal allowance of quarters according to rank, either in kind, or, where no suitable government building is available, by commutation. When traveling on duty an officer receives mileage for the distance traveled; the amount allowed is sufficient to cover all expenses of journey. On change of station he is entitled to transportation for pro-

fessional books and papers and a reasonable amount of baggage at government expense. Mounted officers, including all officers of the medical corps, are provided with forage, stabling, and transportation for horses owned and actually kept by them, not exceeding two for all ranks below a brigadier. Groceries and other articles may be purchased from the commissary and fuel from the quartermaster's department at about wholesale cost price. Instruments and appliances are supplied in abundance for the use of medical officers in the performance of their duties. Well selected professional libraries are supplied to each hospital and standard modern publications on medical and surgical subjects are added from time to time; current issues of a number of representative medical journals are also furnished for use of medical officers.

ARMY MEDICAL SCHOOL.

In 1893 the Secretary of War authorized the establishment of an army medical school in the city of Washington for the purpose of instructing medical officers who have been appointed since the last preceding term of the school, and such others as may be authorized to attend.

The course of instruction is for five months, and will be given annually, when practicable, at the Army Medical Museum, in Washington City, commencing in November.

Five professors are selected from among the senior medical officers of the army, stationed in or near the city of Washington, also an instructor in first aid and ambulance drill.

The faculty of the army medical school consists of:

1. A president of the faculty, who is responsible for the discipline of the school, and who delivers a course of lectures upon the duties of medical officers in war and peace (including property responsibility, examination of recruits, certificates of disability, reports, rights and privileges, customs of service, etc.)
2. A professor of military surgery (including the care and transportation of wounded and operative surgery).
3. A professor of military hygiene (including practical instruction in the examination of air, water, food, and clothing from a sanitary point of view).
4. A professor of military medicine.
5. A professor of clinical and sanitary microscopy (including bacteriology and urinology).

DUTIES AND PRIVILEGES.

Leave of absence on full pay is allowed at the rate of one month per year, and this when not taken may accumulate to a max-

imum of four months, which at the end of four years is then available as one continuous leave. Beyond this an officer may still be absent with permission on half pay. Absence from duty on account of sickness involves no loss of pay.

Medical officers are entitled to the privilege of retirement at any time for disability, incurred in the line of duty, or after forty years' service. On attaining the age of sixty-four they are placed upon the retired list by virtue of law. Retired officers receive three-fourths the amount of their pay proper at the time of retirement.

When medical officers with the rank of captain approach the period of their examination for promotion to a majority they are usually assigned to duty as attending surgeons in the principal medical centers of the United States, to enable them to become familiar with the practice of the leading physicians and surgeons in this country, and to attend medical lectures, meetings of medical societies, etc. These assignments are made for one year only, in order that as many medical officers as possible may be enabled to avail themselves of the advantages thereby afforded. At the end of this tour of duty they are required to make a detailed report to the surgeon general showing how much of their time has been occupied by their official duties and to what extent they have availed themselves of the advantages offered for professional advancement.

EXAMINATION AND APPOINTMENT.

Appointments to the medical corps of the army are made by the president after the applicant has passed a successful examination before the army medical examining board and has been recommended by the surgeon general. Due notice of the meeting of the board is published in the medical journals.

Permission to appear before the board is obtained by letter to the Secretary of War, which must be in the handwriting of the applicant, giving the date and place of his birth and the place and state of which he is a permanent resident, and inclosing certificates, based on personal acquaintance, from at least two reputable persons as to his citizenship, character and habits. The candidate must be a citizen of the United States, between twenty-two and twenty-nine years of age, in the case of a candidate applying for appointment from civil life, and between twenty-two and thirty-four years of age in the case of a candidate who has served honorably in the army of the United States, either as a commissioned medical officer of volunteers or as an acting assistant surgeon dur-

ing the war with Spain or since. He must be of sound health and good character, and a graduate of some regular medical college, in evidence of which his diploma will be submitted to the board. The scope of the examination includes the morals, habits, physical and mental qualifications of a candidate, and his general aptitude for service; and the board will report unfavorably should it have a reasonable doubt of his efficiency in any of these particulars.

The physical examination comes first in order, and must be thorough. Candidates who fall below sixty-four inches in height will be rejected. Each candidate is also required to certify "that he labors under no mental or physical infirmity or disability which can interfere with the efficient discharge of any duty which may be required." Errors of refraction, when not excessive, and not accompanied by ocular disease, and when correctible by appropriate glasses, are not causes for rejection.

The professional examinations are conducted by both written and oral questions, upon anatomy, physiology, chemistry, hygiene, pathology and bacteriology, therapeutics and materia medica, surgery, practice of medicine, obstetrics and the diseases of women and children. Examinations are also conducted at the bedside in clinical medicine and surgery, and operations and demonstrations are required to be made by the candidate upon the cadaver.

Hospital training and practical experience in the practice of medicine, surgery, and obstetrics are essential to candidates seeking admission to the medical corps of the army, who will be expected to present evidence that they have had at least one year's hospital experience, or the equivalent of this in practice.

Candidates presenting a degree in arts, sciences (other than medicine) or literature, those who hold first-class teachers' certificates or who submit evidence of graduation from a reputable high-school or similar institution (approved by the board), will not usually be examined in other than the professional subjects enumerated above. Should a candidate, during his professional examination by the board, present evidence of a deficiency in his general education in elementary subjects he may be required to undergo an oral examination in arithmetic, history, geography, literature, and physics, and such examination, if unsatisfactory, will be cause for his rejection.

Candidates claiming especial knowledge of the higher mathematics, ancient or modern languages, drawing, analytical chemistry, or branches of natural science, will be examined in those sub-

jects as accomplishments and will receive due credit therefor according to their proficiency.

To save unnecessary expense to a candidate desiring a preliminary physical examination, written authority may be given by this office for him to present himself at the nearest military post, garrison, or recruiting station for such examination. Any opinion given as to the result of such preliminary examination must, however, be considered as purely advisory and not as determining the subsequent action of an army medical board in the case.

The merits of the candidates in each of the several branches, and also their relative merit as evinced by the results obtained from the entire examination, will be reported by the board, and in accordance with this report approved candidates are appointed to existing vacancies or to such as may occur within two years thereafter. An applicant failing in one examination may be allowed a second after one year, but not a third. No concession can be made for the expenses of persons undergoing examination, but those who receive appointments will be entitled to travel allowances in obeying the first order assigning them to duty.

As a result of the large increase of the medical corps recently authorized by congress, there are now 123 vacancies; medical men desiring to enter the military service have therefore an unusual opportunity for so doing. Candidates should at once place on file at this office such papers as are required by the terms of this circular. Successful candidates who have had previous service either as commissioned medical officers or as acting assistant surgeons, will have precedence in appointment over those without previous service.

To illustrate the general character of written questions submitted to candidates under examination, a few examples from the records of an army medical examining board recently convened are hereto appended.

GEO. M. STERNBERG,

Approved:

Surgeon General.

ELIHU ROOT, Secretary of War.

War Department, Surgeon General's Office, Washington,
February 4, 1901.

EXAMPLES OF WRITTEN QUESTIONS.

ANATOMY.

1. Describe the origin, insertion, and action of the several muscles attached to the scapula.

2. Describe the origin, course, branches, distribution, and relations to other organs, of the nerves of the arm and forearm.
3. Describe the anatomy of the palm of the hand.
4. Describe the origin, course, branches, distribution and relation to other organs of the internal pudic artery.
5. Describe the anatomy of the ankle joint.

PHYSIOLOGY.

1. Tell what you know about the cerebral localization of the functions of motion and locate some of the so-called motor areas.
2. What are the functions of the thyroid gland and the consequences of its removal?
3. What is the composition of atmospheric air and of expired air?
4. Give a list and a short description of some of the animal albuminoids.
5. What is urea? What is the normal quantity in proportion to body weight? How is it estimated?

SURGERY.

1. Give in detail the preparatory and several following steps of a so-called aseptic surgical operation.
2. What is the nature and origin of pus? What is sepsis and also antisepsis?
3. Describe Chopart's amputation through the foot, with diagram.
4. Give the points of diagnostic differentiation in cases of lupus ulceration, syphilitic ulceration, and epitheliomatous ulceration.
5. Describe the different methods of procedure for the reduction of luxations of the head of the femur.

HYGIENE.

1. What is the normal amount of CO₂ in the atmosphere, how much of this gas is considered admissible in inhabited apartments, and how is the amount determined?
2. What amount of cubic air space per bed would you consider a suitable allowance in a hospital ward?
3. What substances in well or river water indicate, by their presence, contamination from excreta or other organic matter of animal origin?
4. How is the hardness of water estimated and to what is it due?
5. What are the constituent alimentary substances in milk, and how does cow's milk differ from human milk?

6. What vegetable products used as food contain the largest proportion of carbo-hydrates and what the largest proportion of proteids?

7. What parasites dangerous to man may be present in the flesh of animals used as food?

8. How would you disinfect the excreta of patients sick with cholera or typhoid fever?

OBSTETRICS AND DISEASES OF WOMEN AND CHILDREN.

1. Describe briefly the usual mechanism of a breech presentation; what dangers are to be guarded against and what difficulties to be met?

2. Under what circumstances is premature delivery demanded and how would you perform it?

3. What symptoms would lead you to suspect the presence of a uterine fibroid? State how an exact diagnosis can be made in such cases.

4. What measures preventive or remedial would you use in a case of puerperal convulsions?

5. What early symptoms indicate probable onset of the chief eruptive fevers in children? In which does temperature range highest, which has the shortest period of incubation, of invasion, of eruption?

PATHOLOGY AND BACTERIOLOGY.

and what the products of such inflammation?

2. What are the causes of thrombosis, what the composition and varieties of thrombi, and what changes may they undergo?

3. What pathological changes are found in the spinal cord in posterior spinal sclerosis?

4. What changes occur in the liver as a result of chronic interstitial hepatitis?

5. What bacteria are commonly found attached to the diseased valves in mycotic endocarditis?

1. What are the different stages of exudative inflammation

6. What are the morphological and biological characters of the bacillus of diphtheria, and what are the evidences of its etiological relation to this disease?

THERAPEUTICS, MATERIA MEDICA, TOXICOLOGY.

1. By what various agents may antipyresis be produced? Give an example of each class of antipyretics and state how it acts.

2. In a case of typical acute pleurisy state the indications for treatment in its several stages and how you would meet them.

3. What is salol? Give its physiological action and therapeutic uses.

4. Give the source and therapeutic uses of cocaine, the dose in each case, and its dangerous effects.

5. With what condition is poisoning from opium most likely to be confounded? How would you make a diagnosis and how treat such a case?

6. What are the poisonous effects of the lead salts? How is their presence detected? State briefly *your* plan of treatment.

PRACTICE OF MEDICINE.

1. Give an account of the etiology, symptoms, physical signs and differential diagnosis of lobular pneumonia.

2. Give an account of the etiology, physical signs and treatment of empyema.

3. Give an account of the etiology, symptoms, differential diagnosis and treatment of dilatation of the stomach.

4. What are the causes and symptoms of intestinal obstruction, and what is the treatment?

5. What are the causes and results of mitral stenosis and how would you recognize this condition?

6. Give the differential diagnosis between small pox and measles.

CHEMISTRY.

1. How may hydrogen be obtained? State its color and odor, and its weight as compared with an equal volume of atmospheric air under similar conditions. What is meant by "similar conditions" in the last sentence?

2. How would you obtain a jar full of carbon dioxide for experimental purposes? How would you recognize that the jar contained carbon dioxide? What is its chemical formula?—its molecular weight?

3. What is that which is known popularly under the name of "laughing gas?" What is its formula? How is it prepared?

4. What is an anhydrid? Give the names and chemical formulas of two anhydrids?

5. How is sal ammoniac prepared commercially?

6. What chemical action takes place when copper turnings are heated with sulphuric acid?

7. What are the principal ores of zinc? What is the formula for zinc chloride? for zinc sulphate?

8. What is glycerin chemically?

9. Explain the chemical action which takes place when gunpowder is exploded.

THE EFFECT ABROAD OF PROF. KOCH'S LONDON
ORATION ON TUBERCULOSIS.

We are here in vacation, nearly all the professors are out of town; some of them will return by the end of this month and others at the beginning of October to resume their clinics. Meantime, the lectures are delivered by their assistants to many English and American students who are working in the various special subjects—eye, ear, throat, skin—in the bacteriological and Pasteur institutes. Some of these assistants are model teachers, who use their large clinical material to the best advantage. These are considered the dog-days in Vienna, but the weather has been pleasant—the thermometer has not risen above 70 or 80 degrees F. in the shade, and the heat is tempered by refreshing showers, making it pleasant for work and out-door exercise.

Professional opinion here, with regard to Koch's oration at the London Tuberculosis Congress, is partly unfavorable and partly sympathetic. His position is not considered enviable. About twenty years ago he prematurely announced a cure for pythisis by his tuberculin, which Virchow unmercifully proved to aggravate the disease by breaking up local tubercles and disseminating them over the whole system. Veterinary surgeons, nevertheless, have adopted tuberculin as a means of diagnosis in cattle: first, in dairy cows when ailing, or in suspects only, but they have gradually extended the sphere of their operations to the whole bovine race, whether ailing or not. These practices have been carried on without Koch's authority or sanction. Now, after the lapse of so many years, the master pronounces the performances as a flat mistake. This pronouncement has caused great disappointment, especially among his veterinary disciples, and the professor runs fresh danger, like Actæon, of being torn by his own dogs. In the opinion of some, Koch ought to have first broached the subject at local societies before bringing it up in that great assembly—it was too great a shock to his followers. But he had no alternative; the practices founded upon his teaching have assumed such colossal dimensions, the great interests of mankind are so much involved that he was bound to give his new views in the most impressive form. I was thinking of poor Macbeth's moral philosophy:

“——that we but teach
Bloody instructions, which, being taught, return
To plague the inventor.”

The excitement caused by Koch's oration has served the cause of truth by inducing the German government to appoint a commission to examine the whole tuberculosis question, Virchow being one of the commissioners. In his address to the Clinical Society of Berlin, Virchow says: "At that commission I shall endeavor to establish the difference between pathological and bacteriological tuberculosis. Bacteriologists regard everything as tuberculous in which tuberculous bacilli are found. When a section of a wart is put under the microscope and a bacillus is found they take it for granted that there must be millions behind and call it tuberculous, whilst I call only those things tuberculous which are composed of cells—organisms which grow out of the body. Tuberculous bacilli alone do not constitute tuberculosis." There will be the Koryphae of scientists at that commission working together to find a sure basis for therapeutics. Koch's labors are not lost to mankind. Whether the bacillus alone or in conjunction with Virchow's pathological cell or by their discovery of a new ingredient in tuberculosis they are sure to arrive at it at last. Lister commenced his labors with carbolic patty, spray, and faith. He developed his system gradually and patiently until now, when Lord Lister is considered the greatest benefactor of suffering humanity by all nations. Nowadays we are in too great a hurry for immediate cures.—*J. R. Wolf, M. D., F. R. C. S. Ed., in Med. Press and Circular.*

CLEVELAND MEDICAL LIBRARY.

New books added:

Purchased—

St. Bartholomew's Hosp. Report, 1900.

Whitman: Orthopedic Surgery, 1901.

Virchow, Rudolf: Festschrift Internat. Beitr. zur Wissensch. Med., 3 vols.

Muenchener Medicinische Wochenschrift, 1892-99.

Butler: Diagnostics of Internal Medicine, 1901.

Reed: Text Book of Gynecology, 1901.

Cheyne-Burghardt: Manual of Surgical Treatment, vol. 5, 1901.

Cabot: Clinical Examination of the Blood, 1901.

Donated by Dr. C. J. Aldrich—

Fischer: Infant Feeding in its Relations to Health and Disease, 1901.

Donated by F. C. Heath, M. D.—

Trans. Indiana State Med. Soc., 1901.

Donated by D. C. Hawley, M. D.—

Trans. Vermont State Med. Soc., 1900.

Donated by Dr. J. P. Sawyer—

A large framed engraving of Dr. Rudolf Virchow, with autograph.

New Books.

ECZEMA WITH AN ANALYSIS OF EIGHT THOUSAN CASES OF THE DISEASE.

By L. Duncan Bulkley, A. M., M. D. Physician to the New York Skin and Cancer Hospital; Dermatologist to the Randall's Island Hospitals; Consulting Physician to the New York Hospital, Hospital for Ruptured and Crippled and Manhattan Eye and Ear Hospital, Etc. Third Edition of Eczema and Its Management Entirely Rewritten. G. P. Putnam's Sons. New York and London. The Knickerbocker Press. 1901.

In this work the author has succeeded in giving to the profession a clear, practical and instructive treatise, full of valuable hints in the management and treatment of a disease that has long been a source of annoyance and worry to many a physician. The book is one that commends itself alike to the general practitioner and specialist. Well written, large, plain type and easy reading, it admirably fulfills the purpose for which it is intended.

Correspondence.

PARIS, 13th Sept., '01.

Gentlemen:—The General Secretary has the honor to inform the members of the XIIIth International Congress of Medicine that the printing and forwarding of the general volume and of the seventeen records of the sections is entirely finished now.

Any member who, by mistake, should not have received the volumes to which he is entitled, is hereby requested to address his reclamation to the Editors of the Congress, Masson & Co., 120 Boulevard Saint Germain, Paris.

After December 31st, 1901, any reclamation will not be acknowledged.

THE GENERAL SECRETARY.

Notes and Comments.

On 30th August, to Dr. and Mrs. C. A. Hamann, a daughter.

Dr. Morris D. Stepp was married to Miss Elizabeth Ralph on Wednesday, 25th September.

Dr. Guy H. Fitzgerald has gone to New Mexico for a few months on account of his health.

Dr. John R. Pipes has removed to Avon, Ohio, where he has taken the practice of Dr. Obed Yost.

Dr. and Mrs. I. A. Tripp, Nottingham, spent several weeks in Toronto during August and September.

Dr. and Mrs. J. M. Moore, 1960 St. Clair street, spent a week in Buffalo and at Niagara Falls, during September.

Dr. R. E. Skeel, after an absence of several months in Europe, has resumed practice at 1156 Pearl street.

Dr. F. A. Handrick, 2508 Superior street, died at Charity Hospital on 20th September, after an illness of a few days.

Dr. A. C. Nash, 747 Hough avenue, has returned to the city after a vacation of several weeks at his parental home in Ogdensburg, N. Y.

Mr. P. C. Stahl, 199 Ontario street, instructor in German, will be glad to translate from the German to English for the benefit of medical men.

Dr. Fred W. Linn, 1111 Lorain street, until recently a member of the house staff at the Cleveland General Hospital, has been appointed a district physician.

Dr. John Eliot Woodbridge, known as the originator of the Woodbridge treatment for typhoid fever, died at Badenaueim, Germany, on 29th August. The body was brought to Cleveland and buried in Woodland cemetery.

Dr. and Mrs. Edward Lauder returned to the city on Sept. 17th after a vacation of several weeks among the Highlands of Ontario. The doctor also spent a week in Montreal attending a class reunion and banquet at McGill University and witnessing the Oxford-Cambridge and McGill-Toronto intercollegiate meet.

The opening exercises of the Cleveland College of Physicians and Surgeons were held on Wednesday, September 18th. There is a good attendance of students.

Born, on September 16, to Dr. and Mrs. George Seeley Smith, a son.

Dr. R. H. Martin, Mt. Clemens, Mich., formerly of this city, has recently had an operation performed on the knee joint of his right leg in St. Mary's hospital, Detroit. The operation was done on account of a condition resulting from a severe rheumatic attack which the doctor suffered before leaving Cleveland.

The Cuyahoga County Medical and the Cleveland Medical Societies entertained the members of the American Association of Obstetricians and Gynecologists with a smoker at The Hollenden on the evening of Sept. 17th. A delay on the part of the post-office officials in having many of the invitations delivered in time prevented some of the profession from being present.

The Twenty-seventh Annual Meeting of the Mississippi Valley Medical Association adjourned at Put-in-Bay, after a most successful session, on the morning of the 14th, out of respect to our martyred President.

The following officers were elected for the ensuing year:

President—S. P. Collings, M. D., Hot Springs, Ark.

1st Vice-President—J. C. Culbertson, M. D., Cincinnati, O.

2d Vice-President—Paul Paquin, M. D., Asheville, N. C.

Secretary—Henry Enos Tuley, M. D., Louisville, Ky.

Treasurer—Thos. Hunt Stucky, M. D., Louisville, Ky.

Chairman Committee of Arrangements—A. H. Cordier, M. D., Kansas City, Mo.

Twenty-eighth Annual Meeting, Kansas City, Mo., October, 1902.

Medical Society of the Missouri Valley.—The fourteenth annual session of this society convened in St. Joseph on Thursday, September 19th, President Treynor in the chair. After passing resolutions on the death of the President, the society adjourned to allow its members to attend the McKinley memorial services. On Thursday evening the society boarded a special train of Pullman sleepers for Eureka Springs, Ark., where the annual outing occurred, and the regular program carried over from St. Joseph was presented: Address of Welcome, Hon. W. M. Brown, mayor of Eureka Springs; Address on Behalf of Local Profession, Dr. J. B. Bolton; Response on Behalf of the M. S. M. V., Dr. V. L. Treynor, President; Dr. Palmer Findley, Chicago, "An Exhibition of Specimens, Illustrating the Cause of Uterine Hemorrhage;" Dr. E. S. Pettyjohn, Chicago, "The Unreliability of Children's Testi-

mony;" Dr. S. Grover Burnett, Kansas City, "Effects of 190 degrees F. Temperature on Man; the cell lesion; a case;" Dr. H. D. Jerowitz, Kansas City, "Scarlet Fever;" Dr. Chas. E. Davis, Eureka Springs, "Some Twentieth Century Thoughts in Medicine;" Dr. Wm. Jepson, Sioux City, "It is Rational to Operate Upon Every Case of Appendicitis as Soon as Recognized;" Dr. Le Roy Crummer, Omaha, "The Use of Gartner's Tonometer, with Demonstration of the Instrument;" Dr. Charles Geiger, St. Joseph, "Syphilis;" Dr. P. I. Leonard, St. Joseph, "Some Aspects of Syphilis." On Friday evening a reception and ball was tendered the visitors by the local profession and citizens of Eureka Springs, and Saturday was devoted to sightseeing in the mountains, several tallyho coaches and sixty saddle horses being provided for the purpose. After a sumptuous dinner on Saturday evening the members left for the return trip, arriving in St. Joseph on Sunday morning. Following is a list of officers elected for the year: President, R. E. Moore, Omaha; First Vice President, A. D. Wilkinson, Lincoln; Second Vice President, M. F. Weymann, St. Joseph; Treasurer, Donald Macrae, Council Bluffs; Secretary, Charles Wood Fassett, St. Joseph. Semi-annual meeting will be held in Lincoln in March, 1902.

The Cleveland Testing Laboratory, 761 Rose Building, has issued a neat little booklet containing information as to directions for obtaining and preserving material for examination, and cost of examination. Any physician who has not received one may obtain one free of cost by applying at the office in the Rose Building.

The Chinese do not take photographs of their criminals. They merely force them to press their thumbs on a piece of white paper covered with aniline dye, India ink or similar substance. The resultant impressions are stored away, classified and brought out years after, if necessary, to identify a suspected person with one who has already received his diploma for crime. In many parts of the empire thumb marks are used on passports, for they cannot be counterfeited or their passports used by any one but the rightful owner.

A few years ago, in course of transit between New York and New Orleans an express packet of paper money had been opened and \$22,500 of the original amount had been abstracted. Two of the seals had been broken and one had been resealed by thumb pressure. The solution of the mystery baffled the most ingenious

work of the best detectives until, in despair, the matter was referred to an expert in handwriting and other methods of identification. Noting the faint impress of the thumb on the middle seal, he obtained wax impressions of the thumb of all the officials of the particular express company through whose hands the packet was known to have passed. These impressions were photographed and enlarged and one of them clearly agreed with the thumb impressed seal of the broken envelope. The thumb mark of one of the most trusted officials of the company thus betrayed him, and he was promptly arrested, tried, convicted and sentenced.—*Pub. Health Jour.*, September, 1901.

German Physicians Must Cut Off their Beards. The German Emperor has issued his command, and the doctors must now cut off their beards. The Kaiser's own physician as well as the Empress' and their assistants we are told, will be obliged to shave, and the army surgeons may next expect to receive their orders. The cause of all this stir, of course, is the dangerous little microbe. The creatures, it is found, attach themselves easily to a physician's beard or mustache, when he examines his patient's throats, etc., and it is possible then for him to carry the disease in his beard to some other person. Two German professors and a French professor have studied the matter thoroughly, and the former go so far as to say that a skull cap should be worn by the physicians in the sick room.—*Pub. Health Jour.*, September, 1901.

The United States Government, says the *New York Herald*, has formally recognized the responsibility of the mosquito for the transmission of yellow fever and malarial diseases. This is indicated by the issuance of a general order by Major-General Wood, in Havana, directed to his post commanders, reciting that the chief surgeon of the Department of Cuba has reported that it is now well established that malaria, yellow fever and filarial infection are transmitted by the bites of mosquitoes. The troops are therefore enjoined to observe carefully two precautions. They are to use mosquito bars in all barracks, hospitals and field service whenever practicable and they are to destroy the "wigglers," or young mosquitoes, by the use of petroleum on the water where they breed. Permanent pools or puddles are to be filled up. To the others are to be applied one ounce of kerosene to each 15 square feet of water twice a month which will destroy not only the young but the old mosquitoes. This does not injure drinking water if drawn from below and not dipped out. Protection is thus secured

according to the order, because the mosquito does not fly far, and seeks shelter when the wind blows, and thus each community breeds its own mosquitoes.—*Pub. Health Jour.*, September, 1901.

The method of destroying the mosquito is thus described by Major W. C. Gorgas, chief sanitary officer of Havana, who is making war on the insects, not because it murders sleep and is a chronic pest and torment, but because it carries and communicates yellow fever: "The amount of sanitary work continues large. We are not now doing as much cleaning of houses with our own force as formerly, I having transferred about two-thirds of these men to the mosquito brigades. They are employed in cleaning out the various ditches and streams where stagnant water is found, and putting kerosene oil in all of these places. During April about 20,000 houses have been gone over in this manner. A little oil is placed in every receptacle containing standing water and about an ounce into every closet and sink in the houses having water connections. Nearly every house in Havana has a cesspool, and these cesspools are ideal breeding places for mosquitoes. The oil in this way runs into the cesspool and kills the larvæ. I have recently examined several of the main sewers that empty into the bay and have seen a large number of larvæ floating out, showing that a considerable number are being killed by this method." As a result of this policy of destroying the mosquito, Havana during April had but two cases of yellow fever, neither of which was fatal. The month of May opened with a clean slate. Under Spanish rule Havana was a plague city from March to December, and American ports had to quarantine against it.—*The Sun*.

Dr. Louis Knapp, of St. Louis, Mo., has separated himself from his family and from the world to nurse Dong Gong, the Chinese leper, who was found in the city two weeks ago. Dr. Knapp, with his patient, will live in a three-room frame house now being built by the city authorities. There were five other applicants for the position.—*West. Med. Rev.*, Sept. 16, 1901.

The Spitting Nuisance in Germany. At a recent meeting of the German Society for Popular Hygiene the practice of spitting in public places was vigorously inveighed against and the unsanitary feature of the wearing of long trains by women was also made the subject of vigorous denunciation. Resolutions were finally adopted petitioning the government to prohibit spitting in public conveyances and urging women to do away with dress trains for street wear.—*N. Y. Med. Jour.*

"The thumb," says D'Arpentigny, "individualizes the hand." On the ball or cushion-like surface of the top joint of the thumb, as indeed on the other fingers, there is seen a kind of spiral formed by fine grooves in the skin. These are alike in no two individuals. Nature never duplicates these markings. Examining even a thousand million thumbs would show them all to be distinct and different. Individualized by some infinitesimal variation, these markings never change from birth to death, and the right thumb differs from the left.

It is announced that professors of Rush Medical College are planning a series of experiments to determine the effects of different foods upon the mental power of individuals. They will experiment for the most part upon students of the Chicago Hospital School, 5401 Drexel avenue, which has been recently affiliated with Rush. The students of this school, which has a large number of defective children, will be divided into classes and restricted to a particular diet for a certain length of time until the effects can be noted.—*West. Med. Rev.*

Home Made Splints. Dissolve one pound of gum shellac in one pint and a half of ninety-five per cent alcohol, with one drachm borax. Let the mixture stand until all of the shellac has been dissolved; then it is ready to be applied. Old cloth makes the best splints. I generally use an old pair of trousers, apply the solution to one side of the woolen cloth with a brush and dry thoroughly before a hot fire. It takes about one hour to dry properly. Then apply a second coat on the same side and dry as before. You will then have a single piece, but if you wish a stronger piece, apply the solution on one side of two pieces that have already been prepared, dry them, place them together and press with a hot iron, and they will unite and become as one piece. Always be sure to dry out all of the alcohol. To temper the cloth for use, hold before a hot fire until soft, then apply. It will adapt itself to the shape of the limb at once. To make it set quickly, hold in cold atmosphere or dip in cold water.—*Red Cross Notes.*

Medical Treatment for Appendicitis. Rosewater says: Empty the bowels with calomel as a saline. Give a high enema of saline solution if an abscess cannot be made out. The patient should be kept on his back. The diet should be peptonized milk. Opiates should not be given, but applications of ice used instead. For nausea give small doses of calomel and cracked ice. For the nervous symptoms salol and phenacetin combined with citrate of caf-

fein are of the greatest value. Stimulants should be used when necessary. Iodide of ammonium, one to three grains every four hours, will hasten the absorption of the exudate.—*Medical Record*.

Sugar of milk in doses of from forty to sixty grains sometimes proves an excellent diuretic in suppression of urine in infants.

Stone monuments are rarely erected in honor of the neurologist by his fellow-men. But so many stones are thrown at him by his patients that he can build a pyramid for himself.—*L. von Frankl-Hochwart (Vienna)*.—*Dietetic and Hygienic Gaz.*

Nicholas Senn Prize Medal. The committee on the Senn Medal beg leave to call attention to the following conditions governing the competition for this medal for 1902:

1. A gold medal of suitable design is to be conferred upon the member of the American Medical Association who shall present the best essay upon some surgical subject.

2. This medal will be known as the Nicholas Senn Prize Medal.

3. The award will be made under the following conditions:

- a. The name of the author of each competing essay shall be enclosed in a sealed envelope bearing a suitable motto or device, the essay itself bearing the same motto or device. The title of the successful essay and the motto or device is to be read at the meeting at which the award is made, and the corresponding envelope to be then and there opened and the name of the successful author announced.
 - b. All successful essays become the property of the Association.
 - c. The medal shall be conferred and honorable mention made of the two other essays considered worthy of this distinction, at a general meeting of the Association.
 - d. The competition is to be confined to those who at the time of entering the competition, as well as at the time of conferring the medal, shall be members of the American Medical Association.
 - e. The competition for the medal will be closed three months before the next annual meeting of the American Medical Association, and no essays will be received after March 1, 1902.

Communications may be addressed to any member of the committee, consisting of the following: Dr. Herbert L. Burrell, 22 Newbury Street, Boston, Mass.; Dr. Edward Martin, 415 S. 15th Street, Philadelphia, Pa.; Dr. Charles H. Mayo, Rochester, Minn.

It is reported that two of the men who consented to be bitten by inoculated yellow fever mosquitoes in Havana have died.—*West. Med. Rev.*, Sept. 16, 1901.

Hiccoughing. Noir reports an immediate cure of an attack of hiccoughing by means of continuous traction on the tongue for one and a half minutes. The patient, a nervous child, had been hiccoughing almost uninterruptedly for six hours. She had failed to respond to the various remedies applied, and was greatly exhausted. There was no recurrence.—*Med. Times.*

Dr. Koch's New Theory. It is stated that Mr. L. L. Monson, State Dairy Commissioner, has offered himself as a subject for the testing of Dr. Koch's new theory of the non-communicability of bovine tuberculosis. He is a believer in the correctness of Dr. Koch's theory and will allow this test to be made provided an annuity is assured for his family if the test should result fatally.

There are about 2,500 hospitals and asylums in the United States. These give employment to 65,000 people and pay over \$23,000,000 in salaries. These hospitals have 300,000 beds, are attended by 37,500 physicians, and treat over 1,000,000 patients during the year.

Pro Bono Publico. Professor Osler got off a good thing the other day at the British Congress on Tuberculosis. During the opening exercises much was said of a nature flattering to the profession. Dr. Osler remarked that a large delegation had come over from the United States, but that it had not come like some of the "trusts" of which we have heard so much of late, and yet they represented a magnificent "trust." But while the motto of the ordinary trust was "damn the public," their motto was *pro bono publico*.—*Journal American Medical Association.*

Treatment of Erysipelas with Carbolic Acid. N. S. Fraser mentions a case, in the *New York Lancet*, where an erysipelatous inflammation extending down the arm and up to the anterior fold of the axilla was immediately checked by painting around the arm at the upper limit with pure carbolic acid and when the tissue became white the same was painted with absolute alcohol. This is a very simple remedy and we trust it will hold good in every case.

Ascetic Acid as an Antidote to Carbolic Acid. Some time ago when I was washing a wound with carbolic lotion (1 in 40) I had often and often to place my hands in the basin. After a few minutes I felt a peculiar sensation in the whole of my right arm (from fingers up to the shoulder joint). I searched for the cause and found a little scratch by the side of a finger nail. Then I thought

that acid acetic would do some good, so I applied a piece of lint soaked in acid acetic dil. (B. P.) and dipped the finger in the solution. In nearly 20 minutes there was no trouble of any kind. Afterwards I painted 4 layers of strong carbolic acid on the back of my hand and applied a piece of cotton wool soaked in acid acetic dil. to see the result. In three minutes the burning pain disappeared, while in 45 minutes the white mark also disappeared, leaving only a little redness behind.

Then I painted only one layer of the acid on the forearm and proceeded to remove it by the same means.

In 15 minutes there was no mark remaining. It strikes me, therefore, that it might be of use internally also when taken by mistake, and I beg my brethren to try it internally when they have a chance to do so.—*Dhurni Dhur in The Indian Lancet.*

Sulphur Cream. George T. Jackson has had made by his druggist an elegant sulphur ointment which he uses extensively in the treatment of dandruff. Its formula is:

℞ White wax, ʒiiss.
Oleum petrolati, ʒiiss.
Rose-water, ʒj.
Biborate of soda, gr. xv.
Sulphur, presipitated, ʒiiss.

This is an elegant, smooth, white preparation without sulphur odor. It keeps perfectly, does not separate, and is as perfect as an ointment can be made.—*Medical Standard.*

Dr. Osborne's Removal. As we go to press, the morning papers announce that Dr. A. E. Osborne has been expelled from the position of superintendent of the California Home for Feeble-minded Children, and that Dr. Wm. Lawlor, of San Francisco, has been given the appointment. Dr. Osborne has been a faithful and careful steward of this institution; has devoted his life to the study of these conditions; knows his specialty well, and for his reward is, without notice or cause, removed, to give place to one who has bolstered up the lie given to the world by the governor and our local press. The new appointee has not the qualifications necessary to care for persons thus afflicted. His work has been devoted to lines where no doubt it has been of marked advantage to assume qualities which now it is his duty to relieve. This act on the part of our governor is so pointedly and emphatically a political reward that it should receive just condemnation by people and press. The severe censure displayed towards the governor by certain physicians and some of our dailies is very amusing, and

most illogical. They know full well the meaning of this act, and at what price the position was secured. The medico-political history during the last two years is, beyond measure, too disgraceful for further consideration.—*Occidental Med. Times*, September, 1901.

Under the auspices of the Chicago Medical Society a banquet and celebration has been organized in honor of Dr. Nathan Smith Davis, M. D., LL. D., who is the oldest living president of the Society and widely known and honored among the profession by his long connection with the American Medical and other associations. The banquet will take place at the Auditorium Hotel, Chicago, Saturday evening, October 5th, 1901.

Hindoo Physician Arrested for Practising Without a Certificate.—Dr. Albert De Sarak, of No. 413 West Fifty-seventh street, New York, was arraigned in court by agents of the County Medical Society on a charge of practising medicine without a medical certificate. One agent testified that he had called at the office of the alleged physician and had been treated three times for imaginary ills. Dr. De Sarak says he is a Hindoo, an Oriental scientist, a general delegate to the Scientific Academy of Sauceteur, of Paris, and a member of the Oriental Society of Thibet and Calcutta. He admitted that he was not registered, but said he was not practising as a physician and had made no pretence at practising medicine. Magistrate Meade held him in \$300 bail for trial.

Gifts to the New York Academy of Medicine.—The New York Academy of Medicine has recently received a number of gifts. Dr. Abraham Jacobi presented to it on his fiftieth anniversary as a physician, a collection of old German text-books. It has just received from Dr. Charles L. Dana, one of its vice-presidents, a collection of framed photographs of the statues and temples at Epidaurus of Æsculapius, and the trustees of the institution have received a gift of \$10,000 from Mrs. Sarah Barker Gibbs and Miss George Barker Gibbs for the establishment of a fund to be known as the Edward N. Gibbs memorial prize fund. The income of this fund is to be awarded triennially to the American physician who shall present the best original essay on the etiology, pathology and treatment of the diseases of the kidney.

Hot Air as a Therapeutic Agent. Orrin S. Wightman, in the *New York Medical Journal*, says that:

Dry heat is a valuable pain-reliever without any of the depressent effects common to drugs.

In connection with constitutional and medicinal treatment we have in it a positive curative agent.

It is a stimulant to rapid repair and absorption.

It is one of the most valuable eliminative agents we possess.

Where indicated, it possesses a sedative action on the nervous system obtained by no other means.—*Charlotte Med. Jour.*

Different Forms of Sleeplessness. The most common disorder of sleep, writes Chas. A. Dana, in *Indian Record*, is insomnia, but this is only a very general term, for there are many kinds and degrees of sleeplessness.

The approach of sleep may be accompanied with a strain and stress which are very uncomfortable; during sleep there may be an unnatural activity of the sensory and association centers causing dreams, or of the motor centres causing shocks, starts, and spasmodic symptoms. Ordinary control of the visceral centers may be lessened, causing discharges from the bladder, sexual organs and intestines; or the vagus may let go its hold and the patient be awakened by palpitations and dyspnoea. The sensory centers may be stirred up, causing the patient to waken with sensations of light, colored scotomata, thundering noises, violent vertigo, or terrific pain. In fine, the ordinary smooth current of the subconscious activities breaks against some pathological condition, and now one symptom, now another, is thrust out, and so unpleasantly disturbs the sleep and wakens the sleeper.—*Charlotte Med. Jour.*

Constipation in Infants. There are few measures of more importance in securing perfect health of the infant than regular evacuation of the bowels. Colic, indigestion, intestinal irritation, fever, restlessness, sleeplessness, and even convulsions may result from

**DOCTOR:—Send your patients with tender feet to
FRANK GAETANI, 355 Bond St.
and have them fitted with
Comfortable, Properly Made Shoes.
Opposite Hollenden, Cleveland.**

too long a delay of this most important function. Chas. R. Sower, in the *Medical and Surgical Monitor*, says:

In infants under one year of age, constipation is usually due to lack of proper proportion of fats and proteids. In the treatment of constipation we desire to cure, hence we should remove the cause by adopting proper dietetic measures. Drugs, suppositories and enemata are only temporary measures and their promiscuous and continued use should be condemned.—*Charlotte Med. Jour.*

Ophthalmia Neonatorum. Its Prevention and Treatment. Perhaps few of the visible afflictions of our fellowmen excite our sympathies to a greater degree than that of the loss of vision. We pity the starving poor, but their condition can be easily ameliorated by financial aid. We sympathize with the bereaved, of course, but time partially heals many a deep sorrow. The crippled often forget their misfortunes in their many and varied enjoyments. These are the words of Adolph Blitz, in a valuable article in the *Medical Sentinel*, and at the close of it he says:

Strict antiseptic measures before birth—thorough cleansing of vagina when suspicious discharge is present.

Cleansing and disinfection of hands of physician and nurse.

Wash the eyes of the new born first, then the rest of the face, the head, and the body last.

Use a sufficiently strong disinfecting solution *at once*, in the eyes of the infant, when sure, or suspicious, of gonorrhoea in the mother; but a mild cleansing wash only when no disease exists in the vagina.

Inspect eyes of infant daily, during the first week after birth, if possible; if impossible, instruct nurse to report at once, if eyes show any redness, swelling or discharge of offensive secretions.

Because of sudden exposing of cornea for inspection, it may burst and destroy the eye.

Begin the treatment promptly and follow it up rigorously, if apparent that it is a case of true ophthalmia blennorrhoea.

The physician must himself apply the medicines once a day at least, not delegate it to others.

Employ absorbent cotton in cleansing the eyes; never dip it again into the water—or medicines—after touching the eye with it, nor use the same piece for the second eye. Cotton is cheap and you can afford to use it freely. Use it also for applying the silver nitrate.

Persist in the treatment until all inflammation has disappeared and the most possible amount of vision restored.

Treatment of Labial Carcinoma.—The only proper treatment for cancer of the lip is radical extirpation at the earliest possible moment, associated with removal of the anatomically related lymphatic glands. It is quite true that arsenic is frequently used in these cases. We admit that some cases have been cured by its use, but we consider that this treatment is absolutely improper, because it entirely neglects the associated lymphatic glands. Whereas some cases have recovered after the local application of arsenic, a very large number of cases must have perished because the adjacent glands were not removed. The treatment is more painful, produces greater disfigurement, is just as dangerous, and is of infinitely less value than is operation by the knife. In every operation the surgeon must aim at radical removal, and in the majority of cases it is perfectly useless to take away the lips and leave the anatomically related glands.—*Da Costa, in Therapeutic Gazette.*

A rumor to the effect that visitors to the Pan-American Exposition are called upon to pay an admittance fee to each of the exhibit buildings after paying to pass through the gates, appears to have gained some circulation in certain quarters. It is entirely unfounded. The fact is that the visitor after paying the gate fee has the privilege of going through all of the dozens of exhibit buildings absolutely free of expense. The prices of admission are: For adults, 50c; for persons under fourteen years of age, 25c.

The Exposition proper does not include the Midway, which is a collection of amusement enterprises conducted by private companies. To these attractions small admittance fees, ranging from 10c to 25c are charged.

The Staying Powers of Arsenic.—White arsenic is eaten by large numbers of peasants in Syria and the Tyrol with the object of warding off fatigue and improving their staying powers. It is taken fasting, usually in a cup of coffee, the first dose being minute, but increased day by day until it sometimes amounts to the large quantity of twelve or fifteen grains. Several doctors who have made a study of these people, declare that the arsenic-eaters are usually long-lived, though liable to sudden death. They have a very fresh, youthful appearance and are seldom attacked by infectious diseases. After the first dose the symptoms of slight arsenic poisoning are evident, but these soon disappear on continuing the treatment. In the arsenic factories in Salzburg the workmen who are not arsenic-eaters soon succumb to the fumes. The manager of one of these works declared that he had

been medically advised to eat arsenic before taking up his position. He considered that no one should commence the practice before twelve years old nor after thirty, and that in any case after fifty the daily dose should be reduced gradually, as otherwise sudden death might ensue. If a confirmed arsenic-eater were to suddenly stop taking the drug he would immediately succumb to the effects of arsenic-poisoning.—*Indian Lancet*.

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A HOMEOPATHIC PRACTITIONER.

One day while strolling down a lane,
I found young Strephon lying
Beneath a tree, in bitter pain,
Wounded and wan and sighing.

Within his hand he held a dart
From out Dan Cupid's quiver,
And while he plained his broken heart,
His tears ran like a river.

"O cruel Cupid!" loud he cried,
"The wound you gave is mortal,
For Chloe has my suit denied,
And turned me from her portal.

"Ah, woe is me! I die of love"—
Just then the air was thrilling
With rippling laughter from above,
Tuneful as song-birds' trilling;

And on a branch that gently swayed
Sat Cupid, deftly stringing
His bow, then to the wound he'd made
Another dart went winging.

"Coward!" I cried, "the hurt he had
From others should secure him."
"Nay," laughed the wanton little lad;
"It will not kill, but cure him.

"For though the former shaft I sent
Was tipped with Chloe's flushes,
Unto the latter one I lent
The charm of Celia's blushes."

And when, next evening, I espied
Celia and Strephon straying
Through woodland pathways, side by side,
With lover-like delaying,

"Faith, Dr. Cupid," whispered I,
"Your cures are made instant;
The famous motto you apply,
' . . . similibus curantur.'"

—Beatrice Hanscom, in *Scribner's Magazine*.

District Visitor (to old woman): Why, Mrs. Malage, haven't you seen a doctor?

"Why ma'am, my husband don't hold with no doctors. He do say I'd better die a natural death."

BEAUTIFUL SURROUNDINGS.

"Do you think it will take, doctor?" asked the fair young bud who was being vaccinated.

"Well," replied the gallant doctor, "it it doesn't take on such a pretty arm as that, I'll have no respect for vaccine hereafter."

SUCH IS FAME.

The *New York Times* magazine supplement for June 16 is responsible for the following: "Some years ago," said Bishop Potter, in a recent speech, "I was traveling in Minnesota. A man approached me on the railway platform and scanned my features closely. 'Excuse me,' he said finally; 'but haven't I seen your picture in the papers?' I was compelled to confess that he might have done so. 'I thought so,' continued the inquisitive one. 'May I ask what you were cured of?'"—*N. Y. Medical Journal*.

REASONED IT OUT.

Mrs. Cobwigger—"Yes, Freddy, the doctor brought us the new baby."

Freddy—"Say, ma! Is it because we have a homeopathic doctor that the kid is so small?"—*Puck*.

A PHYSICAL IMPOSSIBILITY.

Mike (to chemist): The doctor said: "Take wan of these pills three times a day." I tuk wan of thim wanst, but the man doesn't live that kin take wan of thim three times.

Two children were playing "hospital ward" and were acting doctor and nurse. "Is the patient very ill?" said the doctor. "She has swallowed a whole bottle of ink," replied the nurse. "What have you done for her?" asked the doctor; and the nurse, with professional satisfaction, answered: "I gave her two pads of blotting paper."

"Willie," said mamma, "didn't I tell you to wash your face?"

"Yes, mamma," replied Willie, "and I did wash it."

"Mamma," piped little Elsie, who had just been vaccinated, "perhaps he did do it, but it didn't 'take' the first time."

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TO CONTROL HIGH TEMPERATURES.

Dr. C. C. Booth suggests the following method: "The patient is stripped entirely of all clothing, placed upon rubber sheet and covered with one thickness of a piece of cheesecloth, two yards long and the usual width, one end having been so split that each leg will be covered separately. A nurse is directed to squeeze water about the temperature of the body from a sponge over the entire anterior surface of the body, and to wet the gauze freely as often as necessary to supply water for evaporation. All that is claimed for this method is that it is more convenient, more easily applied, less dangerous, cheaper and pleasanter to the patient than by any other method. The gauze is to be kept wet until the temperature is reduced to normal."—*Philadelphia Medical Journal*.

* * *

ASTHMA AND POTASSIUM IODIDE.

Sir William Gairdner, as the medical world knows, was Professor of Medicine at Glasgow for more than a generation. In an interesting sketch by him of Principal Barclay, who ruled the university when he became professor, he mentions that that eminent divine was a sufferer from asthma, for which he had got a prescription from the famous Dr. Jephson. This prescription was one of those excessively complicated instances of polypharmacy in which fourteen or fifteen different and more or less active substances were combined in one inextricable blend, so as to defeat as far as possible all reasonable effort to discover the modus operandi of any particular constituent. At Gairdner's suggestion Dr. Barclay commenced a series of experiments in his own person on all the separate ingredients in the prescription which could by any reasonable interpretation be supposed to be its active principles, not discontinuing the complex form, but substituting from time to time simpler and simpler combinations, until in the end it was conveyed to him, and through him to Gairdner, that potassium iodide was the agent which in all probability contained the curative virtues of the entire prescription. He points out that, as far as he can discover, the properties here attributed to the iodides were quite unknown to the medical profession at large at the time of the incident. He adds that, although oral teaching may have indirectly influenced professional opinion, the cardinal fact of the Rev. Dr. Barclay's logical analysis of Jephson's prescription has never, as far as he knows, been stated in print before.—*N. Y. Lancet, September, 1901.*

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Original Articles.

COAL TAR ANTIPYRETICS IN CHILDREN.*

BY

J. B. MCGEE, M. D.

Professor of Therapeutics, Cleveland College of Physicians and Surgeons.

While there are many of the so-called coal tar antipyretics, and additions are being continually made, the newer members of this class closely resemble in therapeutic range those first introduced, with whose action we are quite familiar. Their use as antipyretics is rather limited in children, in whom pyrexia, as a rule, means relatively less than in adults, is better borne, and usually responds quite readily to treatment. We are aware that these agents simply control symptoms, possibly serious at the time, and for this action they should be reserved; there is more risk probably in the infection in cases running a continued course at least, and upon the infection they exert no influence. It is asserted too that they are liable to produce depressing effects, to interfere with elimination, and to alter the composition of the blood. We should not, however, discard them because injurious effects have followed their injudicious use, the dose perhaps being too large, too frequent, or possibly both combined; while such results rarely follow small doses rightly employed, and they fill many indications safely. It is a familiar fact that moderate pyrexia is practically harmless, the simple presence of fever not necessarily calling for antipyretics, but when such are indicated, those producing the result with the least risk and shock to the system, and with the least disagreeable incidental effects should be chosen. The bath, cold or warm or in its modified forms of sponging pack, or

*Presented at the Ohio State Pediatric Society, Cincinnati, Ohio, 8th May, 1901.

compress, will ordinarily be sufficient, and the general position of the profession is that it is to be preferred to the antipyretic drugs. Personally, with children, I rarely employ any other agent internally than a simple diaphoretic, small doses of aconite, or of phenacetin. The general estimate of the relative safety of the synthetic derivatives probably is that phenacetin is first, then antipyrin and acetanilid the last of the trio although so high an authority as Hare considers antipyrin the safest; however, in quite an extensive experience with phenacetin, my personal preference, I can recall no case in which it produced serious results, the only unpleasant one being profuse perspiration. Antipyrin and acetanilid have their advocates, but it is said that cyanosis more frequently follows when the latter is employed; Jacobi strongly advises against its use, and it is doubtless true that those agents of the class which, like the phenetidin derivatives, act gradually are less apt to cause collapse. One to three grains for a child two to five years of age every three or four hours, will generally be a sufficient and safe dose of phenacetin, and in addition to the antipyretic effects will often act as a sedative, quieting the nervous symptoms present and favoring sleep.

The newer derivatives allied to phenacetin, as lactophenin and kryofin, are evidently efficient and safe, and my experience with them while limited, has been satisfactory. All the coal tar compounds appear to possess analgesic and antispasmodic powers, and were quite generally employed in whooping cough, and antipyrin probably has the preference here perhaps because of its solubility. Two or three grains daily for each year of the child's age seem to lessen the number and severity of paroxysms. Jacobi recommends from one-half to two grains three or four times a day for each year of age, and an occasional large dose at night, but believes belladonna to be still the best remedy, while Holt prefers antipyrin. My own choice is quinine, which I have given in almost a routine manner, and generally with benefit. The effects produced are doubtless due, as asserted by Binz, to a general rather than a local action, as they usually follow, no matter how it is administered. It is a clinical fact that children bear quinine extremely well, and the only objection is its bitterness, and for some time past I have been using euquinin, one of its derivatives which is tasteless, with equally good results, although it is said to be not quite so powerful. Aspertussis is a self-limited disease; it is generally assumed that no treatment will shorten its course, but while not a specific in any sense of the word, it has seemed to me that quinine, or its

new derivative, used early, does appear to some extent to diminish the duration and lessen the severity of the disease. Antipyrin and phenacetin are also symptomatic remedies in other nervous and spasmodic affections. They are useful in chorea when arsenic, our main reliance, sometimes fails, and in epilepsy form an efficient supplement to, or substitute for the bromides in cases where they disagree.

In influenza I have found small doses of phenacetin as efficient as in the adult, in quieting the nervous symptoms, relieving restlessness, and the neuro-muscular pains. As far as local action is concerned the power of antipyrin in solution, as an active and cleanly styptic, is well known, while acetanilid is quite extensively employed, pure or diluted with boric acid, as an antiseptic dressing; there is some risk of its absorption, however, in children, as several cases of toxic action have been reported from its local use.

THE CONSERVATIVE TREATMENT OF APPENDICITIS.*

BY

S. P. WISE, M. D., MILLERSBURG, O.

I realize that it requires considerable courage to defend the medical treatment of appendicitis. The treatment of this disease has caused a great deal of acrimonious dispute, and it may be difficult to evoke much interest in the subject for the reason that it has been worn well nigh threadbare. It is, therefore, not probable that I will be able to present anything new on the subject, but I hope to make such comments on what has been said as will embody my own views based upon my own personal experience. Those who are familiar with late surgical literature, or have heard the recent utterances of some of our most eminent surgeons on the subject of appendicitis, are aware that the extremists or radicals are all on the surgical side of the question. We are told there is no such thing as medical treatment. That it is essentially a surgical disease and that so-called medical treatment is worse than useless. That it jeopardizes the life of the patient by interfering with timely surgical relief. Moreover, the practitioner who relies upon remedial measures has been held up to the severest kind of censure very little short of a criminal.

After such severe arraignment the conservative element of the profession are certainly justified in making a vigorous defense. And should we perchance suggest to those radicals that

*Read at meeting of Union Medical Association of Northeastern Ohio, held in Cleveland, August 13th, 1901.

their mortality record might not bear close investigation either, or should we even casually intimate that the knife has sent a number across the river who might have recovered under judicious medical treatment, we would simply be giving our reasons for the faith that is within us, without a thought of recrimination.

To begin with, the disease presents so many different phases in its clinical history and mode of onset, that no rule of treatment can be formulated that has not its glaring exception. When the American Medical Association met at Columbus I had the pleasure of seeing about all the leading "appendologists" in the United States assembled in one room. I entered the sacred precincts of that hall with an awe-stricken feeling such as I had never before experienced. I sat there the whole afternoon with open ears, eyes and mouth, expecting every moment to hear the utterance of an established principle, or an infallible rule that would forever settle the question as to when cases of appendicitis should be operated on; but I failed. I came away knowing but very little more than I did before, except that my confidence was shaken in the reliability of statistics, while I was forcibly impressed with the *lie*-ability of some statisticians.

Now, as a representative of the Conservatives, I wish to state emphatically that it is far from our purpose to minimize the triumphs of surgery or to detract the least from its glory in its relation to the treatment of appendicitis. We know very well that a large number of persons have been saved by the superior skill and faultless technique of the modern surgeon. We also believe that many cases are permitted to die annually by reason of the timidity of the medical attendant, or the opposition of friends, who might be saved by a skillful operation performed at the proper time. There is, therefore, no disagreement between us as to the necessity of an operation in a certain class of cases at an opportune period in the development of the disease. To define our position clearly we may style ourselves "Opportunists." As before stated we grant that there are exceptions to all rules in the treatment of appendicitis. We also realize that both the surgeon as well as the physician are oftentimes confronted by complex conditions and unique circumstances in the development of the disease, that tax the profoundest and most mature judgment to the utmost. We generously concede all this in extenuation of our radical friends. But when the statement is made that every case of appendicitis should be operated on at the earliest possible moment, that there is no remedy but the aseptic knife of the surgeon, and that the medical treat-

ment is simply "high-grade Christian science," forbearance ceases to be a virtue and we draw the line. If the rule were adopted to operate at the earliest moment of an appendicular pain or supposed appendicitis the question arises how many cases of mistaken diagnosis would occur in which the appendix would be found free from disease. Some very good authority answers this question by placing the number at 10 per cent. in the hands of the experienced surgeon, and 30 per cent. in the hands of those who are inexperienced. We can, therefore, not be far wrong if we place the average estimate at 20 per cent, viz., one person in five afflicted would be the victim of a mistake and would have his abdomen unnecessarily opened. Would not this be a revolting state of affairs? Who would want to practice surgery with such contingencies staring him in the face. Our radical friends tell us if perchance you should cut down to a healthy appendix, remove it, the person will thereafter be immune from the disease which will in a great measure compensate for the mistake. This would be all well and good if we had positive assurance that none would die; but some of them will die in the hands of the most skillful operator, and under the most rigid aseptic precautions. In case of death of such a patient in whom so grave an error had been committed by the surgeon, how could he exculpate himself in the estimation of the friends? To tell them that the deceased happened to be one of the unfortunate ones who are destined to die that others might live would scarcely assuage their grief. I do not know how it would be in the city, but I do know that if a surgeon were to make a mistake or two of the sort in our country it would break his professional neck with neatness and dispatch, and if he was not a most ingenious and resourceful liar he might be held accountable before a court and jury. I am well aware that the majority of surgeons do not believe that inflammation is possible without bacterial infection, and therefore would maintain that an exploratory laparotomy ought never be fatal if properly conducted. While bacteriology has illuminated many obscure recesses in the pathologic domain, yet to my mind it has not refuted the theory of simple inflammation. The principle of the determination of blood to a part, *ubi stimulus ibi fluxus*, holds good today as well as it did in the days of Williams, Rokitansky and Cohnheim half a century ago. An irritant applied to a frog's foot under the microscope will produce all the phenomena of inflammation as well as it ever did without the presence of the *bacillus coli communis* or any other bacillus or coccus; and there can be no tangible reason why the same

results should not obtain in the human intestine and peritoneum.

The liability to error in diagnosis is, however, not the only objection to the early operation in appendicitis. Even if the surgeon is correct in his diagnosis, to operate at the earliest inception of the disease is to expose the patient to an unjustifiable danger. We who insist upon the conservative management of the disease believe that the mortality would be materially reduced if the operation were deferred until an opportune time in the course of the disease. The gist of my paper is precisely this mooted point, viz., shall we by the judicious use of ice and opium and other rational measures endeavor to get through the period of acute inflammation—when the operation can be performed with comparative safety—or shall the knife be the earliest and only remedy?

The question arises, why is the early operation hazardous? It is so because in operating the surgeon interferes with nature's conservative effort to circumscribe the disease. He breaks down the protective barrier which nature is throwing around the infected area for the purpose of limiting the infection to as small a focus as possible. If the patient dies shortly after an operation, the surgeon consoles himself in the belief that the inflammation had extended to the general peritoneal cavity before the operation was performed, when the fact probably is that breaking up the adhesions had permitted a spread of the infection and the peritonitis is the result of the operation. I think it is a recognized fact that the early pus that is formed in appendicitis is the most virulent and it is evident that it would be extremely difficult to prevent inoculation of the peritoneal cavity by the usual means at the command of the surgeon.

Fencing off the field of operation with aseptic gauze seems ridiculously inadequate to the ordinary observer. At any rate it has always seemed to me that stuffing an armful of gauze into a peritoneal cavity where there is already a circumscribed inflammation cannot else but irritate and invite an extension of the disease.

Prof. Broca, surgeon to the Paris Hospital, has lately published his experience and expressed his views in favor of the conservative treatment of appendicitis. He says several years ago he did not trust the ice and opium treatment except in those cases in which there was merely appendicular colic with no appreciable swelling and hardly any rise of temperature. But little by little he tried the method with cases of increasing gravity until now he resorts to the medical treatment in the beginning of every case. In

speaking of cases that died soon after the operation he says: "But when death occurs two or three days or more later, is not the general peritonitis that is found post mortem sometimes the results of the operation itself? * * * It is difficult to decide whether peritonitis that is fatal preceded or followed the operation, and the instinctive tendency of all of us leads us to think it existed before we operate. Thus when I operated on all cases at once I conscientiously believed that my failures were due to pre-existing peritonitis. But now that I wait I lose only one-third as many patients and it is impossible for me not to believe that I treat them more skillfully." In summarizing his results he indulges in the following laconic statement: "Localized foci all cured; diffuse peritonitis all dead." The foregoing declarations by a prominent French surgeon are worthy of respectful consideration, and I would commend to you for careful reading his clinical lecture on the subject published in the last volume of the *International Clinic*. You will find it the most candid and conscientious report on the subject that has ever been produced. It stands out in noble contrast with Prof. Devers' arrogant enunciations at Minneapolis, in which he denounced the medical treatment as being nothing more than "high-grade Christian science."

It seems strange that so many medical men of the present day fail to recognize the medical properties of opium, especially in the treatment of inflammation of serous membranes. The orientals print on the cakes of opium "Mash Allah" (the work of God), and indeed no scientific physician will dispute that it is the greatest boon the Creator has vouchsafed to man. When a student I had the pleasure of listening to the eloquent lectures of Prof. Alonzo Clark, of New York, who was the author of the opium treatment of puerperal peritonitis. Before Prof. Clark called attention to the great tolerance of opium in this disease, the fatality was enormous; but the adoption of his suggestions in the treatment robbed the disease of many of its terrors and fatal cases became the exception instead of the rule. I well remember in lecturing to us on the subject he said he would not attempt to give us the dosage required to control the disease, but he said, "give enough opium to control the pain and keep it under control; and if ever I hear that one of you attempts to physic a case of inflamed bowels I will erase my name from your diploma." In the early days of my professional career, before aseptic precautions were taken in obstetric practice it devolved upon me to treat quite a number of cases of puerperal peritonitis, and some I remember

would have stricken terror to the heart of the most courageous. I was quite successful and I attribute my success to keeping in mind Prof. Clark's admonition, "give enough opium to control all pain." When a case of perityphlitis presented itself in the non-puerperal state I regarded it as an inflammation which if left alone would surely become a general peritonitis, and I naturally relied upon the same treatment. Thus it was that I am an advocate of the opium treatment today. I grew up in it, and inasmuch as the change of nomenclature could not change the nature of the disease, consequently my faith in the old treatment remains the same. There is no doubt in my mind but that opium acts as a true anti-phlogistic in acute inflammation of any part of the intestinal canal, its coverings or its attachments. It not only quiets pain by acting upon the nerve centres, but it also has a decided anæsthetic effect upon the terminal nerve fibres. It destroys the effect of irritation to the sensory nerves and thus diminishes the blood supply to the part by restricting vascular dilatation. If therefore we take into consideration the physiological effects of opium it is not difficult to estimate its utility in the treatment of appendicitis. Limiting the blood supply to an inflamed part will give the same relief as raising the hand does in lessening the pain in an inflamed finger. Opium is more especially efficient in the treatment of inflamed intestines or peritoneum because it arrests peristalsis and thus gives that rest to the part which is nature's grandest and most beneficent remedy. I believe the arrest of peristaltic action is the chief and most potent factor in preventing the diffusion of the infection and its attendant inflammatory process. The parts are held quiet while nature seals them together with plastic lymph, thus forming a most efficient barrier around the infected focus—i. e., nature will kindly do this if not interrupted by the surgeon's fingers. The objection is urged that opium will lock up the secretions. This is probably true in many cases in the first few days of its administration, but I have often seen the tongue grow moist and the appetite return while the patient was under its steady influence. This is usually the case at the time when the pulse and temperature are falling, and the local symptoms indicate that the disease is yielding. While it does lock up secretions for the time being it also renders absorption sluggish and thus restricts general infection and at the same time in the majority of cases it causes profuse perspiration, the benefits of which are quite apparent.

The most pernicious dictum that has ever been promulgated by high surgical authority is the statement that opium must not

be given to any extent in appendicitis because the symptoms of the disease are thereby obscured. I have often wished that those eminent surgeons who have written or expressed this idea could see the damage they have done. If they were obliged to witness the pain and agony that is permitted to go unrelieved by reason of their authoritative influence, they would surely retract the advice. I have been called in consultation where I heard the patient moaning twenty rods from the house. When I asked the doctor why he did not relieve the pain I received the usual reply that some authority advised against the use of opium because it obscured symptoms. What an inhuman absurdity. We might with equal propriety prohibit the fire department from throwing water on fires because the steam arising therefrom obscured the flames. Why allay the pain in gall-stone or renal colic? Why apply a splint to a broken limb? Why administer chloroform in child birth? Is the physician to be a messenger of relief and mercy or is he to be actuated in his mission by the sentiments and ambitions of Parrhassius when he stood watching the vultures devouring the vitals of Prometheus as he lay chained to the rock.

“Pity thee? So I do;
 I pity the dumb victim at the altar;
 But does the robed priest for his pity falter?
 I’d rack thee, though I knew
 A thousand lives were perishing in thine;
 What were ten thousand to a fame like mine?”

We all know that nothing will reduce the vital powers and induce prostration more rapidly than severe adominal pain, and it would seem to be the physician’s duty to relieve it under any and all circumstances. Of course the practitioner who is not familiar with the physiological action of opium, and is not able under the various circumstances of idiosyncrasy and temperament to recognize the lethal effects of the drug, is as dangerous an individual as he who would undertake to use the knife and was totally ignorant of the anatomy of the parts. We all know there is a certain bedside knowledge that is acquired by scientific observation and experience which cannot be described in words. This is especially true in the treatment of appendicitis.

As regards the tolerance of opium I have had exceptional cases that required 10 to 12 grains of morphia or its equivalent in opium daily to allay the pain. In the majority of cases, however, 8 or 10 grains of opium was sufficient. It is very important that the tolerance of each individual case should be ascertained as early as possible. For this reason the physician should remain with his

patient or see him frequently until he has ascertained the required dose. There is one point in the medical treatment which to my mind comes nearer being a criterion as to the necessity of an operation than any symptom I know of, and that is the pulse rate under the use of opium. If the patient is relieved of pain and the pulse does not fall to 100 or thereabouts in the first four or five days, an operation ought to be seriously considered; especially if the local conditions make the diagnosis sure. Again, if the pulse was brought down by the use of opium and after a number of days—say eight or ten—the pulse rate increases to 110 or 120 then an operation is imperative, especially if the mass of exudation shows a gradual increase instead of a diminution in size.

After the severity of the case is over with and the symptoms begin to subside the doses of opium ought to be gradually diminished, but not entirely withheld until the local tenderness has subsided. Oftentimes the too early withdrawal of the remedy is followed by a renewal of the local trouble with all its attendant symptoms.

One of the cardinal points in the treatment which tests the practitioner's judgment to the extreme, and upon which may hinge the life or death of the patient, is the management of the bowels. If called early to treat a case of appendicular pain the physician does well to give a saline cathartic at once and if possible defer the opiate until the bowels are evacuated. In some cases the bowels will respond to drachm doses of sulphate of magnesia given once or twice a day despite the constipating effects of opium. This is a favorable state of affairs providing the movements are not attended by pain. If the movements are painful or prostrating in their effects, the indications are that some portion of the intestine is inflamed and anything that will cause the bowels to move must be interdicted because it will kill the patient. I have often permitted such patients to go 12 to 14 days without movement of the bowels and generally their action was restored soon after the opium was discontinued.

CENTENNIAL ADDRESS TO THE EASTERN OHIO
MEDICAL ASSOCIATION AT A RECENT MEET-
ING IN STEUBENVILLE, O.

BY

J. F. PURVIANCE, M. D., STEUBENVILLE.

A Centennial Address is a wide divergence from the usual themes of a medical meeting. The present, however, is an occasion that invites to a line of thought made appropriate by the

beginning of a new century. It is a period that but one of every three generations of mankind have the opportunity to celebrate. At the rate of one meeting in three months this association will hold four hundred sessions before the first meeting of another century is held. Long before this period, we that now meet as members of a professional fraternity will have passed from the scenes of life and only be known by what we have been in the past. Other names will then fill our roster and other forms will occupy the seats of this Society's Hall, where they will enjoy the inheritance of what we may have left. It is evidently proper, therefore, that we devote a little thought to the recent past, the present and the future of what pertains to our Society relationship.

There is much to be said concerning the interest of a medical society that must be omitted in the limited time at our command. The object of all societies being the mutual benefit of their members in all that pertains to their nature, we at once recognize a list of possibilities in the wide range of duties to which a medical society is devoted that would be tedious to consider. The present resources of medical science is alone a fit subject for a volume and offers unlimited themes for the medical society.

The practice of this science at present is not the empirical use of drugs for diseases that are only known by name, with no reference to pathology, location or inherent tendencies with different cases and conditions. It is not a procedure without the light of reason or the exercise of judgment. It calls for the aid of various sciences by whose collateral light every step is made with a purpose and with a warranted expectation of definite results that skill can alone secure.

Anatomy points to the structures in which the enemy is stationed. Physiology reveals the active duties of all the wonderful parts with which we have to deal. Chemistry unfolds the elementary constituency of our being and explains the existence of the products of affinity. Histology contributes its aid through a knowledge of the minute structure of tissues as they are formed by the aggregation of living cells. The mysteries of the microscopic world contain the armies of destruction with which we must contend in the preservation of life and the restoration of health. We must learn the influence of heat and the use of light. We pay our respects to water for its cleansing virtues and catch the electric flash to quicken the cell activity of our bodies.

Nowhere in the active career of man has his widened embrace included so many of the world's offerings as in the science of medicine. Its mineral, animal and vegetable kingdoms unite in all their wonderful provisions for the afflictions of man. He that stands in the presence of these unnumbered offerings and deals them out to a corresponding number of existing wants is the physician; and as he thus serves in the care of afflicted humanity he is impressed with the voice of conscience as it proclaims care, care in your work, for in it rests the responsibility of human life.

Such is an epitome of the physician's field of work and the extent of his needful research; and with a conception of its magnitude we can only estimate the offerings of a medical society as of important value, as through its life the physician is strengthened in his resources and inspired with greater zeal in his field of action. The loss of such opportunities to still better prepare for the great work of the physician is one that none can afford to realize.

From year to year the claims of medical science increase in number, and so widen in the extent of their application that every avenue of aid to the physician is to him of imperative value. While his text books, his periodicals and his experience are all to be appreciated, the progressive physician enjoys an additional benefit in the meetings of his society that is peculiar to it in both its extent and its nature. The related experience of others on these occasions are added to his own as the benefits of a corresponding additional life in his profession. Not only is he aided in the possession of practical knowledge, but by such associations he is enabled to contrast his stock of knowledge with that of others and thereby recognize his own defects as well as his comparative merits. He may either be influenced to greater efforts in aspiring to competency, or be made more self-confident in the exercise of his own ability.

Without the medical society we are left in the tiresome journey of professional life with no means of estimating our rate of speed or determining the comparative success of our efforts. These facts are too well recognized by the thoughtful and active physician to make their mention of importance to that class of the profession. Unfortunately, however, there is a class of medical men so indifferent to the value of a medical society as to ignore its privileges so far as to never enjoy even a remote relationship. Others also are found who are members of the household but are so reserved in a spirit of co-operation as to be but little benefitted

and of but little use to others. The extent to which a society is composed of this class of members will commonly prove a reliable criterion by which to estimate its lack of prosperity. Its usefulness is always commensurate with the interest and activity of its constituent parts.

It is highly important, as we enjoy the presence of anything that contributes to our welfare, to properly concern ourselves in the conditions by which its existence is perpetuated and its value preserved. Health may embellish the cheek of its possessor with its rosy tint and make light the footsteps as they are directed in the pursuits of life. For years it may secure the greatest comforts of life until by a continued disregard for the conditions by which its presence is secured it is forced to withhold its blessings and leave the subject a worthless victim of disease. The structure that spans the water course where it has served the wants of a generation in crossing from day to day is, in the absence of needful care, seen to shake with infirmity. Its joints are heard to creak in support of its burdens, until at last it sinks in the waters below as a victim of neglect.

In the presence of such lessons from the laws of nature the interests of a medical society should be observed with scrupulous care. If the incipency of decrepitude develops, or the blight of an approaching marasmus is indicated by the presence of empty chairs in the regular meetings, there is a call for treatment to eliminate a toxic indifference to duty that is paralyzing the vital forces.

Whatever the state of a society may be, it is as its members have made it in the discharge or disregard of their duties. It is not as a vine that springs from the rocky cliff and spreads its luxuriant branches to surrounding objects regardless of care or the efforts of man. It is the creature of man: the product of his will and his efforts. Its needful soil is one made fertile by science where its growth must be fostered by the warmth of devotion. With these environments it will grow in all that adds to its strength and utility; but without them it will decline until its existence ends in the absence of sufficient friends to mark its resting place.

The Eastern Ohio Medical Association is yet in the vigor of youth. It has passed the period in which the ailments of infant life can threaten its welfare. It is surrounded by the elements essential to its health and prosperity; and enjoys a record, a record that secures the respect of its neighbors. These facts are pleasing

to relate and encouraging to future expectations of its prosperity; yet it is important that we be mindful of duties that must be met in securing the continued enjoyment of its presence. A few general rules should always be observed while a claim to membership is made by any individual.

No member should feel a privilege to be absent from a meeting of the society when it is possible to be present. Neither should he be present for the exclusive purpose of being benefited, but to help and be helped.

Official duties are above all others in importance. A single neglect in this may largely disturb the progress of a meeting and thereby weaken the energies of a society.

The president, by way of responding to the courtesies conferred on him by the society, as well as in the discharge of duties resting on him as a member, should always be promptly present. A failure in this is suggestive of indifference and is not free from a like influence with others. The secretary should never forget the importance of carefully presenting a record of the last meeting at the opening of each succeeding one. Committeemen should carefully discharge the duties resting with them by virtue of their respective appointments. Nowhere is this of more importance than in the preparation of programs. The value of a meeting is so largely influenced by its program that every care should exist in its preparation. Not only should subjects be appropriately selected, but this should be done sufficiently in advance of meeting to allow ample time for preparation in their presentation and discussion. Haste in work leads to imperfection in results, and even a good subject if poorly presented will fail to elicit a merited interest. Time for thought and research is not only a pre-requisite in the due preparation of a subject, but it is an important provision against the timidity that commonly prevails with those not accustomed to the presentation of papers or the public discussion of topics. A due regard should be paid to all defects in the accustomed routine of a society and when such are observed no delay should exist in their removal. It is not needful in destroying the usefulness of machinery that a great number of its wheels be broken. While they are certain in their result it is also true that the absence of a single wheel, or the existence of a broken spindle will with certainty secure the same result in disturbing the proper motion of all its parts. So far is this true with an organized society that no disturbed condition of its parts can exist without their corresponding results. Its connecting elements must work

in harmony or its action is disturbed and its existence threatened. Its success demands the co-operation of all its parts, which implies that they are in their proper places and united in activity with all to which they are connected. In this complete condition it moves with force and harmony in yielding the results for which it is intended.

We make these references with no desire to cast reflection on any one, yet if there be such as constitute a broken link in the Eastern Ohio, it is hoped they will fully appreciate the force of our suggestions.

A conscious belief in the value of an active medical society should stimulate every loyal member to the discharge of a duty that can only be done by his hearty co-operation in its work to an extent corresponding to his ability. With such an element prevailing the meetings of this society would result in a crowded hall where the outpouring of scientific truth would make them a series of intellectual banquets. There could be no period more inviting to good purposes than the present. We are stepping from an old to a new century. In the past we now only exist in history, over whose records we have no further control.

To that portion of the new century in which we shall continue to meet we sustain a different relationship. In it we are welcomed to such privileges as will secure prosperity or adversity as results of a spirit of devotion or indifference. As to which shall exist the future alone can speak. Its voice is now indistinct, and its scenes are obscured by distance; yet when I turn to it with anxious desires I discern a spacious hall. Its floor is richly covered with the velvet softness of carpet. Its inviting seats are numbered by scores. Its walls are embellished by costly specimens of the painter's art. In its center hangs a great chandelier, glittering in its polished beauty and electric jets. A lengthy table stands in the rear filled with diminutive scales, measures, microscopes, chemicals, etc. At a little distance to the side is a massive case burdened with the latest and most important medical literature.

In the opposite are shelves displaying specimens of human and comparative anatomy. Great tumors are here preserved and sections of deformities from disunited or maladjusted fractures. Cerosed livers, tuberculous lungs and lardaceous kidneys, with many other pathological specimens, all unite in an interesting invitation to view this rare exhibit of wonderful things. There is yet one other scene and it lends us inspirations of joy beyond

that of all the others. Over the door of this chamber of science
are the capital initials in gold, E. O. M. A.

This, Eoma, is but a mental picture of what should be;
As a reward for thy virtues it is due to thee.
A poverty that makes the homeless and obscure
Is a state thou should now no longer endure.

Thy existence should be speedily embellished
With a home that is tastefully furnished;
Where thy friends may meet in counsel together,
In the interests of science and aid to each other.

In what better work can we now engage
Than to fill this century's opening page
With our efforts to thus amply prepare
For thy present and thy future welfare?

BLOOD EXAMINATIONS AS AN AID TO SURGICAL DIAGNOSIS.

(Bloodgood, *Maryland Medical Journal*, September, 1901.)—
A number of interesting points in connection with this more modern development of our surgical science are mentioned by Bloodgood. For example, a general anæsthetic is contra-indicated when the patient's hæmoglobin is below fifty per cent., a fact well worth knowing. A sudden rise in leucocytes after an abdominal operation is of greatest value in determining an obstruction, in which event the number goes above 20,000 as a rule; in fact, a positive diagnosis can be made thus before clinical symptoms could possibly guarantee the same. The blood count is of great value in appendicitis as indicating the amount of inflammatory involvement in and around the little organ. Indeed, it cannot be underestimated when one considers three cases of gangrenous appendicitis related by the author. In them the leucocyte count varied from 35,000 to 23,000; but without this none of them would have been operated, so slight were the clinical symptoms. Of course all must have ended fatally without the surgical procedure, which, as it turned out, saved them. In general it may be said that in peritonitis the leucocytes decrease in number after a preliminary rise; and, furthermore, this may be taken as a grave prognostic indication. Where the count is above 18,000 in the first forty-eight hours of an acute abdominal attack Bloodgood would operate, no matter what the clinical symptoms. From the standpoint of prognosis, it may be said that a high count is favorable and a low one unfavorable to operative success.—*Illustrated Med. Jour.* October, 1901.

Abstracts and Extracts.

THE MECHANICAL OR COMBINED PLASTIC AND MECHANICAL TREATMENT OF RETRO-DEVIATION OF THE WOMB.*

In this paper the writer, Dr. Marcus Rosenwasser, Cleveland, wishes to counteract the effect of the numerous articles written on the surgical treatment of retroversion. Too many serious operations are being performed, when safer and equally successful procedures would suffice. His own experience leads him to advocate repression of this too strenuous operative tendency and to teach the tentative use of mechanical means in properly selected cases, limiting operations to cases for which they are specially indicated.

The operations to the indiscriminate use of which objection is raised are those requiring opening of the peritoneal cavity, or cutting of the abdominal wall, and are entitled "suspension" operations in distinction from those styled "plastic," which include curettage and repair of cervix or vagina.

Retrodeviations of the womb are either *simple* or *complicated*. The complicated are subdivided into those with *movable* and those with *fixed* womb.

Of 116 patients treated for retroversion, 63 of the second and third degree were selected as proper subjects for mechanical treatment. They were treated by means of the pessary alone, or the plastic operation was supplemented by a pessary. From a table furnishing the details the following summary is obtained:

Cured, 11; symptomatically cured, 15; improved, 26; not improved, 11.

In the body of the paper the writer considers each of the divisions, as above classified, and illustrates by a brief history of typical cases. He maintains that cases of complicated retroversion with movable uterus can be converted into simple ones by plastic operation and are then subject to treatment by mechanical support. After refuting the objections generally raised against the pessary, he submits the following conclusions, based upon the present imperfect status of suspension operations:

1. A retroverted womb uncomplicated by disease should be replaced and supported by a pessary.
2. Retroversion complicated by diseased womb, or by impaired pelvic floor, the womb being movable, requires preliminary

*Read before the American Association of Obstetricians and Gynecologists at the annual meeting in Cleveland, September 17, 1901.

plastic operation to restore the normal condition before using a mechanical support.

3. Suspension operations should not be done simultaneously with the plastic in face of the probability that a pessary can sustain the womb in position.

4. Retroversion complicated by aggravated prolapsus requires simultaneous plastic and suspension operations to effect a cure.

5. The treatment of retroversion with fixed womb is that for pelvic inflammation. Whenever the latter requires laparotomy, or colpotomy, the retroversion becomes subject to such surgical treatment as may appear best suited to the particular case.

6. Retroversion, simple or complicated, in which mechanical support and plastic operation have failed to cure or to relieve, and in which the symptoms demand relief, constitutes a proper indication for a suspension operation.

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TREATMENT OF CROUPOUS PNEUMONIA.

In the *American Journal of the Medical Sciences* for June, 1901, G. M. Morris gives the following summary of treatment in five hundred cases of pneumonia treated at the Pennsylvania Hospital:

The treatment has been expectant and symptomatic. Venesection in sthenic cases to overcome cyanosis or marked dyspnea has proved of great benefit. Wet or dry cups and the ice-bag have been found useful for the relief of pleuritic pain. A mercurial laxative at the onset and the free use of opium to allay erethism, pain, excessive cough, and to procure sleep, have been seldom omitted. Ammonium carbonate has been employed when bronchitis has been marked and the sputum very tenacious. Hyperpyrexia was occasionally combated by sponging; more usually left untreated. When stimulation was indicated, strychnine, whiskey, spirits of ammonia, nitroglycerin, camphorated oil, caffeine or digitalis were ordered. Oxygen inhalations were apparently the means of tiding a number of cases over the critical period. Transfusion in connection with bleeding was occasionally resorted to in cases where toxemia was great.—*Thera. Gaz.*, Sept. 15, 1901.

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THE MUSTARD BATH IN FUNCTIONAL CYANOSIS OF THE NEW-BORN.

In all probability many a practitioner has resorted to the mustard bath in cases of sudden depression in infants, from what-

ever cause. Cyanosis, with death imminent, to all appearances is an accident that sometimes happens to a new-born infant, and that, too, in the opinion of Dr. Adrien Besson, without atelectasis of the lungs or other organic disease. At a recent meeting of the Lille Anatomoclinical Society (*Journal des Sciences Medicales de Lille*, May 11, 1901), he reported three cases in which the mustard bath had proved promptly efficient and the dangerous condition had not recurred. It is always well to bear simple remedies in mind.—*New York Medical Journal*, June 29, 1901.

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INFANTILE ATROPHY.

John Lovett Morse (*Med. News*, Sept. 14, 1901,) recounts the well-known symptoms of this affection. The prognosis is grave. Most of the cases result fatally. If recovery takes place it is always slow and is usually interrupted by frequent relapses. When recovery occurs, however, it is complete and the future development is not interfered with. There is no known drug which has any specific action in infantile atrophy. Treatment necessarily consists largely of regulation of the diet with the object of providing some food which can be easily absorbed and utilized by the individual infant. Mother's milk, of course, is the best food. Although there are no data based on scientific experiments to suggest in what way cow's milk should be best modified for these cases, clinical experience has shown that, as a rule, the patients do best on milk that contains a low percentage of fat, a moderate percentage of sugar, and a moderate or somewhat high percentage of proteids. Treatment by large doses of cod-liver oil is not only useless, but harmful. Due attention must be paid to cleanliness and to the maintenance of an unusual supply of fresh air and sunlight. Alcohol, preferably in the form of brandy or whiskey, is often necessary.—*N. Y. Med. Jour.*, Sept. 21, 1901.

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NATURE ABHORS AN OBLIQUITY.

"A study of the sayings of the average Chicago professor leads to the wonder if Mr. Rockefeller will ever get tired putting up his money for that sort of thing."

The above quotation is from the lay press and doubtless indicates well the general feeling regarding most of the startling announcements which have recently emanated from that source. One of the most absurd was to the effect that parting the hair in the middle was a sign of degeneracy. This in spite of the fact

that nature, with very few exceptions, abhors an obliquity and that to part the hair in the middle line is in keeping with the artistic law and is rational from every point of view, except that of fashion. Lateral parting is an aberration like the Chinese queue. A painting of Christ in keeping with the Chicago idea would bring out in a convincing manner the foppish origin of the lateral parting.—*Penn. Med. Jour.*, September, 1901.

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ARSENIC AS A STIMULANT OF NUTRITION.

The *New York Medical Journal* of June 29, 1901, says editorially that the recent great "epidemic" of chronic arsenical poisoning in England has at last served the good purpose of supplying a large field for the study of the effects of arsenic in healthy persons, and the literature of the drug has in consequence been notably enriched. Among the articles that have appeared, we recall none more valuable than that contributed to the April number of the *British Journal of Dermatology*, by H. G. Brooke, physician to the Manchester and Salford Hospital for Skin Diseases, and Leslie Roberts, honorary dermatologist to the Liverpool Royal Infirmary. These gentlemen deal with the subject systematically, and their article is well worthy of careful study in its entirety. Except for one aspect of it, that in which the action of arsenic on nutrition is considered, our restricted space forbids our attempting to summarize it, although we may call attention to two general statements of interest, namely, that female patients predominated among those who sought hospital treatment, although the women of the lower laboring class in the district consume less beer than the men of the same class, which tends to show that women are more susceptible than men to the action of arsenic; and that the poisonous effects upon the nervous system and those upon the integument were rarely well marked in one and the same individual.

As to the action of arsenic on nutrition, the authors think it stimulates that of certain cells beyond their capability of endurance, so that they perish. They think their observations afford strong evidence in support of the view, put forth by Binz and Schulz, that the physiological effects of arsenic are due to the development of ozone within the system. The arsenic-eating habits of many of the Styrian Highlanders, they remark, afford an excellent instance of the tolerance of arsenic by man. The drug is said to improve the complexion of the women and to maintain the strength and spirits of the men under severe physical

exertion. In countries where arsenic is found native, they point out, it has long been customary to administer white arsenic to horses with their food, and, it is stated, with much benefit to their coats and their general condition. It is added that sheep are reputed to be very tolerant of arsenic. Arsenic kills some micro-organisms, but to others it seems to impart new life. The writers mention the readiness with which mold fungi grow in a solution of potassium arsenite, a fact which has led to the addition of spirit of lavender in the official preparation. They point also to Geiss's observation that young rabbits to which small amounts of arsenic were administered regularly grew to an extraordinary size. The restorative properties of arsenic in certain nervous derangements are well known, and perhaps it may find a place in therapeutics as an actual restorer of tissue elements.—*Thera. Gaz.*, Sept. 15, 1901.

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INTRAVENOUS INJECTIONS OF SODIUM CACODYLATE IN PULMONARY TUBERCULOSIS.—BY DR. ANELLI.

The author reports a case of pulmonary tuberculosis in an advanced stage, in which he used intravenous injections of sodium cacodylate with good results. Five centigrammes of sodium cacodylate were injected daily in solution in one cubic centimetre of sterilized water.—*Riforma medica*, July 19, 1901.—*N. Y. Med. Jour.*, Sept. 21, 1901.

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MOVABLE KIDNEY AND ITS FIXATION.

Schiassi, in *Riforma medica*, July 22, 1901, states that he has used with success the following technics for nephropexy: He makes a lumbar incision cutting through the deep lumbar aponeurosis along the same line, and separates the circumrenal fat. The kidney is now grasped with the left hand and brought into position out of the wound and maintained there by packing around it some layers of gauze. Two crossing incisions are now made in the middle of the posterior surface of the kidney, so as to enable the surgeon to reflect four little flaps of capsule and to denude about three or four square centimetres of kidney tissue. The flaps are resected at their bases. The organ is now pierced from before backward with three long round full-curved needles armed with long pieces of catgut, the sutures being placed at equal distances, the first at the upper pole, the second in the middle of the kidney, and the third at the lower pole. The kidney is now replaced into the cavity of the abdomen, the needles and the ends

of the threads being kept in hand. The needles are then passed by means of needle-holders through the entire thickness of the muscular wall. The convex surface of the kidney is thus fixed to the posterior or internal margin of the deep lumbar aponeurosis, while the external margin remains free. The aponeurosis and the other muscles are then sutured, and the skin wound is closed with interrupted sutures. A small capillary drainage tube is left. In this manner the kidney more readily assumes its physiological position, namely, more closely to the median line and more perpendicularly along the axis of the body. No recurrence has been noted in twenty cases of operations done in this manner. —*N. Y. Med. Jour.*, Sept. 21, 1901.

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RECOLLECTIONS OF THE FIRST OPERATION PERFORMED UNDER ANESTHESIA.

In a letter to Prof. J. P. Webster of Chicago, published in the *International Journal of Surgery*, Dr. G. M. Angell, of Atlanta, tells of the first use of ether as an anesthetic. He says:

"My recollection of the event you mention extends to the winter of 1846 or 7 while attending my last course of lectures in the medical department of Harvard University.

"Dr. John Warren was president of the medical department at Harvard, and chief surgeon of the Massachusetts General Hospital. Some time about the middle of the lecture term a rumor was circulated amongst the students of the medical quarter in the city that an agent had been discovered which would do away with the pain of a surgical operation, however severe. At length it was announced that at the next operating day at the hospital Dr. John Warren would perform an amputation of a leg and would make use of this agent as an experiment.

"This statement reached the newspapers of the city and excited much discussion among surgeons and physicians of Boston and the surrounding country. On the morning of the day appointed for the operation, I went as usual to the hospital, but much earlier, as I anticipated from the great reputation of Dr. Warren and the importance attached to the experiment that there would be a large attendance at the clinic.

"When I arrived a very large crowd had already assembled in front of the hospital, reaching out to the sidewalk and street, but the door was kept closed until the usual hour of opening arrived. I passed in by a private door with a student; we went directly to the operating room and chose our seats. This room was a vast

amphitheatre with terraced seats rising in a circle on three sides of the room almost to the ceiling. In front of these seats and separated from them by a low railing was the operating stage, a door leading out from it into the wards of the hospital.

"My companion and myself took our seats close to the railing and directly opposite to where the operating table stood, and impatiently awaited events. Meantime the crowd outside increased to such an extent that when the hour arrived and the doors were opened the great hall was filled to overflowing with the rushing host which filled the seats and aisles to their utmost capacity.

"Dr. John Mason Warren, son of Dr. Warren, Dr. Bigelow, son of the professor of theory and practice in Harvard, and Dr. Parkham had just entered upon their professional career, and all of them in subsequent years became celebrated as authors and practitioners.

"Presently Dr. Warren, Sr., came in, and soon after a young man having in his hands a glass globe, perhaps eight inches in diameter, with a mouth-piece attached, and a hole in the top, stopped with a cork, containing a clear liquid, we did not know what it was.

"I was not personally acquainted with this gentleman, but it was whispered around among the seats that this was Morton, the reputed discoverer of the agent which was to be experimented with.

"Very soon the ward attendants brought in the patient who was to be operated upon, a young woman about twenty-four or five years of age, and laid her upon the table. The three young attendants arranged themselves in line on the opposite side of Dr. Warren, Sr. Morton leaned against the railing a few feet from where we sat, holding the globe in his hands.

"Dr. Warren commenced to speak and a profound silence reigned throughout the room. He referred to the disease which rendered the operation necessary (necrosis of the knee-joint), and commented upon its nature quite fully, spoke of the remedies which had been adopted; that they had all proven abortive, and that the limb must be sacrificed.

"In all this there was no deviation from the usual custom before an operation; he was the same quiet, dignified old gentleman as when talking to a few medical students sitting on the benches. After finishing these remarks he turned a little more, facing the audience, and said, that he had been forty years a surgeon in the city of Boston, and that from time to time during

that period persons had come to him and said that they had an agent which would do away with the pain of a surgical operation. On account of the great blessing it would be to the human race if such an agent could be discovered, he had heard what they had to say, and if he thought there was no danger to be apprehended from the remedy, and if they were persons whose character and standing seemed to entitle their opinions to respect, he had made the experiment desired. He had tried galvanism, magnetism and hypnotism. There was a curl of the lip as he announced these agents, which we very well understood to mean that he had no confidence in any of them. 'But,' continued he, 'in every instance when the knife was applied to live tissue there was pain.'

"And now we have a gentleman here (turning to Mr. Morton) who tells us that he has a liquid preparation, by the inhaling of which the pain will be entirely done away with in the operation. He has furnished abundant evidence of his having administered it frequently in minor surgical operations, and that no pain was felt and no injury accrued to the patient.' Then, addressing Mr. Morton, he requested him to come forward with his agent.

"Morton came up to the table, put the mouthpiece to the mouth of the patient, giving her a few whispered directions, and took the cork from the hole in the top of the globe. Imagine, if you can, the death-like stillness that pervaded that great audience for the next few minutes. The patient's eyes were closed as if in sleep, the chest rose and fell as in deep natural sleep.

"I was not more than six feet away from the patient and could see every motion. The silence was broken by Morton taking the mouthpiece from the patient's mouth. He said in a loud voice to Warren: 'She is ready for the operation, sir.' Dr. Warren replied, very gently, at the same time searching for a pin on the lapel of his coat: 'You think she'll not feel any pain now, do you?' Mr. Morton said: 'No, sir.' Warren had found a pin, took up the arm of the patient and forced the pin into it, at the same time looking at her countenance. He repeated this two or three times; she did not change the muscles of her face. He then turned quickly, picking up a catling, and made a rapid incision through the integuments and superficial layers of the muscles. The operation was circular and at the lower third of the thigh.

"He stopped an instant and looked earnestly into her face; she showed no signs of pain, not a muscle moved. He finished

the division of the muscles, sawed off the bone, put the leg under the table in front of him. He stepped aside, crossed his arms behind him, and said: 'John, tie those arteries,' sponged off the stump, put in, as customary in those days, three stitches, and commenced to put on the straps. All this time the old gentleman was traveling back and forth across the stage, and as he passed by he would look down into the patient's face. Just then she turned her head a little to one side and gave a groan, like one coming out of her sleep.

"The old gentleman took hold of her sleeve and called her name; she looked up at him in a dazed manner and said: 'Sir.' 'I guess you've been asleep, Jane,' he said. 'I think I have, sir,' she replied. 'Well, we brought you here for the purpose of performing the operation on your limb.' 'Yes, sir,' she replied. 'Well, are you ready for the operation?' 'Yes, sir,' she said. 'I am ready.' He reached out, picked up the limb, showed it to her, and said: 'It is all done.'

"I have no ability to describe, nor shall I attempt it, the scene which followed. Men seemed beside themselves with joy; they clapped their hands, stamped and yelled until the building seemed to reel; pandemonium seemed let loose.

"During this melee the patient was carried into the ward and put into bed. Warren was still walking to and fro on the stage apparently oblivious to everything. The audience, thinking that he would make a speech, gradually quieted down. When they were still the old gentleman turned around and facing the audience said: 'We have seen what we have seen. At some future time I may have something to say about it, but today nothing.'

"The audience dispersed, the physicians hurried to their offices, those out of town to their homes, and the students to their books, and the greatest discovery of the nineteenth century was an accomplished fact."

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NOTES ON LEPROUS-IMMUNE AINOS.

In the *Medical Fortnightly* for Oct. 10, 1901, Dr. Albert S. Ashmead writes as follows: Ainos are the aborigines of Japan, now residing on the Northern Islands: Yezo, Saghalein and the Kuriles, but only on their southern shores. For twenty centuries they have been immune against leprosy. While the Japanese have been scourged, not an Aino has contracted it. Let us see whether there is reason for this freedom from so dreadful a fate. I record a few notes regarding this strange people.

The Aino language is a distinct one, and apparently in subjugation. In Hakodate, the main port of Yezo, there are no Ainos, although they come there to sell bear cubs. They are hunters and sportsmen. The men and women all part their hair in the middle, yet they are not degenerates, though Prof. Stair, of Chicago University, for that reason would say so. They neither cut nor trim it. Many have their hair hanging down the back. There is no written language, and no dates. Their history is from mouth to ear. Fish-skin boots are worn, and deer-skin clothing. Ainos are of a kind and generous disposition, docile and tractable. They are keen hunters.

Yezo is from Yebiso, meaning "shrimp" or "savage," referring to the mode of carriage, when being presented to the Japanese officials, they drag the leg after them like a shrimp.

All women have the mouth and arms tattooed. The upper lip covered with tattoo, the under one slightly. Tattooing is commenced in childhood, and each year a little is added. No mention is even made of a person after he has died. Bear skulls are placed on the fences, and are venerated. Women suckle bears. They fatten and eat bears. The bears are kept in cages in many of their houses.

Ainos erect a T-shaped cross over the graves of their dead. Captain Cook says that the Ainos of the Kurile islands were converted to Christianity by Russian missionaries; perhaps this is the reason of the cross. Professor Giglioti mentions a tradition among Ainos, as to their descent from a wooden doll ("bambola") which swam from Corea to the then uninhabitable island of Yezo. He also suggests an ethnological connection not found in Von Brandt's paper, viz.: With the lower race of Russians, basing it on features of physiognomy and enormous growth of whiskers and beard. He thinks it the most logical one. He remarks that in all Japanese works, the semi divine heroes of Nippon are invariably represented as more robust and hairy men than the modern Japanese, and considers this a sign that it is the primitive race of Japan which has now retreated into the interior of Yezo. Such also is the opinion of Von Brandt.

The Ainos have always been shunned by the Japanese, because of their hairiness and because they killed and ate the bear: the killing of animals being expressly forbidden by Buddhism and Shintooism. The name Aino in Japanese means "dog," and was given to them as a term of reproach. Thus there has always been absolute *isolation* of the Ainos in the midst of a people who were always leprous.

The hardihood of the Aino skin to an extent that it is covered with a growth of hair, which conceals the flesh, as compared with the glabrous Japanese who is enervated by double daily hot bathing has served to ward off possible inoculation of germs of leprosy.

The Aino is mosquito proof—as surely protected against that pest as the bear. Not only the odor of the bear, which every Aino carries about with him, but the coating of hair on the Aino's body, are always on guard to ward off insect life. Bear meat as diet, is more leprous protective to man than Buddhist fish diet. As Dr. Faulds in his biological notes, Asiatic Reports, says: "Race *has* some influence on pathological processes, and he cites as instances the facts that blisters on Japanese stain black and not white, as in Negroes. And that Japanese—European mixed progenies—take after the Japanese parent, and not the European." Were this last fact otherwise, they would essentially die out in that climate. And the Japanese by refusing the right hand of fellowship and amalgamation with those leprous-proof Ainos, for twenty centuries have paid the penalty for their violation of racial pathology law—they were scourged with leprosy.

A race crowding in on another race, to survive must amalgamate with it, to adapt succeeding generations to the new climatic influences. Moreover, the Japanese should have used the Aino's food. Even if it does carry with it the *bothnocephalus latus* (broad tape-worm), as in Russia, Poland, Switzerland or Yezo-Saghalien and the Kurile islands, bear's flesh, as aliment, is far better than either raw fish, with its *Argulus foliaceus* (fish-louse of the carp), or half-cooked holothuria (sea-slugs) which have fed on mosquito larvæ or other insects which bite and suck the sores of lepers, in the "Happy Country of the Dragon fly,"* as Japanese poets call that country.

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THE COMPARATIVE VIRULENCE OF THE TUBERCLE BACILLUS FROM HUMAN AND BOVINE SOURCES.

Dr. Mazyck P. Ravenel (*University of Pennsylvania Medical Bulletin*, September) sums up an exhaustive article on his experimental investigations into this subject, as follows:

In view of the foregoing experiments, and of the evidence quoted, it seems justifiable to conclude: 1. That the tubercle bacillus from bovine sources has, in culture, fairly constant and persistent peculiarities of growth and morphology, by which it may tentatively be differentiated from that ordinarily found in man. 2.

* The food of the dragon-fly is the mosquito.

That cultures from the two sources differ markedly in pathogenic power, affording further means of differentiation, the bovine bacillus being very much more active than the human for all species of experimental animals tested, with the possible exception of swine, which are highly susceptible to both. 3. That tuberculosis material from cattle and from man corresponds closely in comparative pathogenic power to pure cultures of the tubercle bacillus from the two sources, for all animals tested. 4. That it is a fair assumption from the evidence at hand, and in the absence of evidence to the contrary, that the bovine tubercle bacillus has a high degree of pathogenic power for man also, which is especially manifest in the early years of life.—*N. Y. Med. Jour.*, Oct. 12, 1901.

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THE INFLUENCE OF CLIMATE ON THE NERVOUS SYSTEM IN DISEASE.

In the *Denver Medical Times* for June, 1901, Eskridge details his idea in regard to this question as follows, considering the unacclimated and the acclimated patients at the same time, under one heading:

Most health seekers who come to Colorado are suffering from tuberculosis of the lungs. Many nervous and mental disturbances frequently develop during the course of the disease. The most prominent of these are insomnia, nervous irritability, mental depression, sometimes amounting to melancholia with suicidal tendencies, and meningitis.

What, if any, are the influences of Colorado's climate in developing, lessening, or in relieving these mental and nervous complications in tuberculosis?

Insomnia in tuberculous subjects that is due to malnutrition resulting from wasting of the tissues, poor assimilation, and indigestion, is almost invariably relieved here if the condition of the lungs is such as is likely to be improved by a residence in this climate, provided the patient does not take too much exercise, especially during the first months of his stay in Colorado.

Nervous irritability, due to the depressing influence of tuberculosis, may be greatly lessened or almost entirely gotten rid of if the health of the patient improve. On the other hand, persons who have had irritable and impressionable nervous organizations from childhood, the "inherently nervous," as the author has termed them in previous communications, are not likely to receive any relief from their nervousness in Colorado. In fact, this class of cases are likely to become more nervous here unless a very quiet life is led. Of course, there are exceptions to this broad statement.

Mental depression in tuberculous subjects is more common here than what is found at sea level. There are several reasons for this state from causes other than climatal. Patients here are often separated by hundreds or thousands of miles from relatives and friends, and they feel their isolation and loneliness keenly. They frequently come here with insufficient means for their support, and are compelled to seek some employment immediately on their arrival, or before they are able to do any kind of work. It has been noted that an undue proportion of cases of severe mental depression and melancholia are among these two classes. Melancholia is exceedingly rare in the better favored clases of tuberculous subjects.

The question may be asked: Is tuberculosis more likely to attack the central nervous system in Colorado than is found to be the case at sea level? In the adult, we may safely answer in the affirmative; in children, if we take into account the larger proportion of tuberculous parents in Colorado, it seems to the author that we are justified in answering in the negative. The reason for the central nervous system in the tuberculous adult suffering more frequently from tuberculosis than what is found at sea level is not far to seek. Of the great number of tuberculous patients that come to Colorado for their health only a small percentage are permanently cured. Not an inconsiderable number die after a few months' or a yew years' residence here, while the vast majority that do well live many years and lead comparatively useful and active lives. These always remain tuberculous, with a lessened power of endurance and resistance. They often do as much work as healthy persons, and often more, and expose themselves until at last their vitality is permanently far below normal, when the tuberculous processes begin to attack the various organs of the body, until finally the bacilli find entrance to the central nervous system, especially to the membranes of the brain. In a few words, tuberculous subjects live longer in Colorado than at sea level, more tissues are invaded by the bacilli, and the membranes of the brain form no exception to the general process of invasion.

How are such functional diseases of the nervous system as hysteria, neurasthenia (commonly known by the laity as nervous prostration), chorea, epilepsy, migraine, nervousness or neryous excitability, insomnia, and neuralgia influenced by the climate of Colorado?

Hysterical subjects do better at sea level than in Colorado, unless the hysterical manifestations are due to depressed states of

health that are relieved by a residence in Colorado. The same may be said of neurasthenic subjects, except that some of the causes of neurasthenia are more commonly removed by a residence in Colorado than are those of hysteria. Neurasthenic persons should lead quieter lives in Colorado than at sea level. It is here that the Weir Mitchell "rest cure" shows off to good advantage.

Sufferers from sick headaches, or migraine, usually do better at sea level than in Colorado, although the headaches are often relieved for a time on the patient's first coming to Colorado, but are made worse by a prolonged residence here.

After a short stay here sufferers from sick-headache are often free for months on returning to low altitudes. The ideal life for those afflicted with migraine is a frequent change of climate from Colorado to sea level, living at least two-thirds of the time at low altitudes.

Choreic patients should be sent by choice to Colorado for treatment, because all such functional nervous diseases are more or less unfavorably influenced by the climate here, especially when the altitude exceeds 4,000 to 5,000 feet. However, if by force of circumstances choreic children are compelled to come to Colorado, they can be cured in about as short a time here as they can at sea level, provided the precaution is taken to keep the patients in bed until all violent movements have subsided.

Epileptic patients seem to be unfavorably influenced by the climate here, but not nearly to the extent popularly believed. As a rule, the higher the altitude the more violent and frequent the attacks.

The nervous and the impressionable from childhood are less comfortable in Colorado than at low altitudes, but they can reside here with comparative comfort if they live quiet lives and do not enter into business or social engagements that are too exacting. On the other hand, those who have become nervous and run down by worry, overwork (especially the mentally exhausted), too great social cares, and by bearing burdens too great for their strength, if they come to Colorado and live quietly, without allowing themselves to become mentally or physically exhausted, they do well here, and apparently regain their health more rapidly than at sea level. One apparent reason for this result is the amount of sound and refreshing sleep obtained here for this class without the use of hypnotics.

Insanity is less frequent here than in Eastern States, in proportion to the population. It runs about the same course here as it

does at sea level, with the exception of the excitable and wildly maniacal, whose irritability is apparently increased by high altitude and a dry atmosphere.

Organic diseases of the nervous system. No marked difference in the frequency, course, and results of this class of nervous diseases here has been observed from what has been found to hold in Philadelphia, in which city the author practiced for nearly ten years before being forced to seek Colorado's climate.—*Ther. Gaz.*, Oct. 15, 1901.

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Dr. Rufus Cole in an article in the *Johns Hopkins Bulletin* for July, 1901, says:

"I have during the past few months made a series of cultures from the circulating blood of typhoid patients. The technique briefly was as follows: the skin over the anterior surface of the arm at the bend of the elbow was carefully cleaned with green soap and water, followed by alcohol, ether, bichloride of mercury (1-1000) and a hot compress soaked in the latter solution applied for from one half to one hour. It was found by experience that the hot compresses were of considerable importance in causing dilatation of the superficial veins. When ready to take cultures the bichloride was removed by sponging with sterile water. In a few cases the skin over one of the veins was incised and the vein dissected out before inserting the needle. This is usually a very unnecessary procedure, giving the patient a great deal of pain and apparently increasing rather than decreasing the chances for contamination. The only case in which my cultures were contaminated was one in which this was done. By thoroughly cleaning the skin and hands of the operator and by touching the needle only with sterile forceps, never with the fingers, and by working with as little delay as possible, all danger of contamination can be avoided. Just before inserting the needle the arm is grasped tightly below the shoulder by a nurse or assistant and the needle is quickly inserted into one of the superficial veins. By using a small needle and entering the vein with one thrust there is no more pain in obtaining 8-10 cc. of blood than in the administration of a hypodermic or in the puncture of the ear. In all cases 8-10 cc. of blood were withdrawn and after removal of the needle from the syringe the blood was divided among a number of tubes or flasks filled with bouillon. At first tubes were used, but in the last six cases, Erlenmeyer flasks, each containing 150 cc. of bouillon, were used. One to six flasks were used for each case, so that the dilution of

the blood was from 1-75 to 1-50. The flasks were then shaken and placed in the incubator and after twenty-four hours, if cloudy, agar plates were made. Usually the organisms in the bouillon were somewhat clumped, at least sluggishly motile, and so not suitable for trying the serum reaction.

"The diagnosis of bacillus typhosus in each case was decided by motility, staining properties, typical growth on agar, glucose agar, gelatin, litmus milk, bouillon, Dunham's peptone solution (which after one week's growth was used for indol test) and finally agglutination by known typhoid human serum, dilution 1-50, in one hour. Frequently a fairly definite conclusion can be reached in thirty-six hours after obtaining the culture. If the bacilli grow out in the bouillon in twenty-four hours, they can be transferred at once to the various media, and from the slant agar after 6-8 hours, a suspension in bouillon can be made in which the serum reaction can be tried.

"Cultures were made from 15 cases, in 11 of which the typhoid bacillus was cultivated. From the last 7 cases in which a greater dilution of the blood was made, the bacillus was obtained every time. The cases included both those of moderate severity as well as those of great intensity. Five of the 11 cases in which the results were positive subsequently died, so that apparently cultures were taken from the more severe cases, though this was rather accidental than intentional, as they were chosen at random. Three of the cases in which the organisms were isolated had very light attacks.

"From all the results given, it is apparent that typhoid bacilli occur in the blood with much greater frequency and during a much longer time through the course of the disease than was formerly supposed. The conditions which favor their presence, why they are found at times in mild cases and are absent in more severe ones, are questions which must yet be solved. That cultures from the blood in typhoid fever have very definite clinical importance, especially where the Widal reaction is delayed, as is so often the case, is evident. From my experience the use of considerable amounts of blood, diluting very largely in liquid media, and on account of the use of the latter especial care to avoid contaminations, are the points of chief importance."

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PROFESSOR KOCH'S THEORY.

The *Munchener Neuste Nachrichten* publishes a long interview with Professor Edin Klebs, one of the leading German au-

thorities on tuberculosis. Professor Klebs sharply criticised the theory that human and bovine tuberculosis are essentially different. He cited several cases, which, in his opinion, conclusively proved that both adults and children were subject to infection from the milk of cows suffering from tuberculosis. The only one of his six sons who had been fed on cows' milk had died of tuberculosis in his second year. None of the others who had received their first nutriment from wet nurses, had suffered from the disease.—*Indian Lancet*.

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TREATMENT OF TUBERCULOSIS WITH UREA.

(A. H. Buch, F. R. C. S., *Phil. Med. Jour.*, September 14, 1901.)—The idea of this treatment is founded upon the fact that gouty or rheumatic persons are particularly immune to tubercle; therefore, urea is given to increase the amount of uric acid or urea in the systems of the tuberculous. The author reports three cases of lupus and two of scrofuloderma cured by its internal administration without active local treatment. From twenty grains to a drachm of the agent is given three times a day. The author believes that this discovery will revolutionize the treatment of tuberculosis.

Dr. Buch is not the originator of the idea, but Dr. Harper, of Nottingham, to whom he gives full credit.—*Interstate Med. Jour.*, October, 1901.

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TRUE DENTAL STIGMATA OF SYPHILIS.

(*Pediatrics*, August 1, 1901.)—In an editorial attention is called to the fact that the subject of the teeth in hereditary syphilis is enveloped in mist to the great majority of medical practitioners. The milk teeth are subject to decay and irregular growth from a variety of causes, such as fevers, stomatitis, rickets and malnutrition. Erosions, facets, hollows and deformities may be found, but there is nothing characteristic in these.

In the second set, however, when the general health is good, changes occur which are more or less characteristic:

1. *Irregular decay*. Cupping or hollowing, or general "collapse." This may be suspicious, but is too often seen elsewhere to be of great value.

2. *Furrows (dents rayes)*. Certain of these may be cause for serious consideration; the "sulciform erosion" of Parrot belongs to this class.

3. *Microdontism*. This is emphasized by Fournier. He attributes greatest significance to the dwarfism of the incisors.

4. *Atrophy of the crown.* The top of the tooth has a shrunk-en and wrinkled look, comparable to a small tobacco-pouch with the strings pulled tight. This change may occur as far back as the first molar. In the incisors the cutting edge decays more at the center than the margins, and we get the tapering tooth with concave, half-moon cutting edge (Hutchinson's teeth).

5. *Chalk lines (sillons blanc).* These are rare. They are described as milky or chalky in color, and found on the two upper front permanent teeth. They are horizontal, symmetrical, about one milimeter in width, and occur midway between the gum and the crown.—*Interstate Med. Jour.*, October, 1901.

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THE TRANSMISSIBILITY OF HUMAN TUBERCULOSIS TO CATTLE.

In the recent number of the *Revue de la Tuberculose*, Professor Arloing contributed a critical examination of the views of Prof. Koch on the possibility of the transmission of tuberculous infection, (*British Medical Journal*, Sept. 21, 1901). He says that Dr. Koch considers that to decide on the alimentary origin of an infection, the infection must be localised and must remain in the intestine. Dr. Arloing considers this criterion too strict. The propagation of the lesion sometimes takes place so rapidly that it is difficult to decide which was the primitive lesion. He goes even further and believes that tuberculous lesions can appear at the seats of election without the virus having left any trace at its point of introduction, that is, he admits the possibility of a "pulmonary tuberculosis of alimentary origin without any intestinal lesions." In experimental inoculations, especially in rabbits, Dr. Arloing has obtained visceral tubercle, without any trace of tubercle at the point of inoculation or in the subsequent course followed by the infecting matter. To reduce still further the dangers from bovine tuberculosis, Dr. Koch, in the insufficient number of cases of alimentary origin which he recognizes, makes a distinction between the cases due to ingestion of bovine tubercle and those due to the ingestion of bacilli of human origin. Dr. Koch indicates as a criterion that on making a pure culture of the bacilli existing in the tuberculous lesions and inoculating them under the skin of cattle "characteristic results" will be obtained, if the tuberculosis is of bovine origin "after an incubation period of about a week large tuberculous lesions will be found in the organs of all the animals injected." Dr. Arloing has injected bovine tubercle into the subcutaneous connective tissue of heifers without obtaining any visceral lesions; the effects were limited to local lesions and tubercu-

lous nodules in the nearest lymphatic glands. Lesions of human origin have not necessarily and always the same virulence. Dr. Arloing has shown that glandular or scrofulous lesions and many surgical tuberculous affections are less virulent than the majority of the tuberculous lesions of the viscera or the serous cavities. The latter infect the rabbit and the guinea-pig, while the former only infect the guinea-pig. Moreover, certain tuberculous lesions, which at first infect the guinea-pig alone, will after several passages from one guinea pig to another, increase in virulence, and will then infect the rabbit. His pupils, Courmont and Denis, have also found attenuated bacilli from the human lung, analogous to those in tuberculous surgical affections, able to infect the guinea pig, but producing no effect on the rabbit. Dr. Koch says that human tuberculosis cannot be transmitted to cattle, with which he classes the pig, sheep, goat, and ass. Dr. Arloing has kept in his laboratory on glycerinated potatoes, a culture of very virulent tubercle bacilli of human origin, with which he has made intravenous injections in the ass and goat, subcutaneous injections in the cow and guinea pig, and intraperitoneal injections in the rabbit.

Inoculation of the Ass.—Two asses were injected on September 28th, 1896. At the post-mortem examination lesions were discovered limited to the thoracic cavity.

In the first ass, which died in less than a month, the lungs showed here and there congestive lesions, and, in addition, throughout the lungs, but especially in the anterior lobe of the left lung, were some tubercles, giving to the finger the sensation of resistant grains.

In the second ass, killed on November 28th, the lesions were more evident to the touch than to the eye; the finger felt a large number of resistant circumscribed points. Microscopically, in the first ass were found tuberculous granulations more or less accompanied by simple inflammatory lesions classical in type. In the second ass, tuberculous granulations were easily recognized, but they were invaded by connective tissues.

A third ass received two injections at fifteen days' interval (March 27th). On May 27th the animal was killed, and showed (a) a multitude of small elevations, shining at the apex and there surrounded by a zone of congestion; (b) a large number of flat circular spots of the diameter of a pea, and of a whitish color. Microscopically the firm shining elevations were found to be tuberculous granulations, the peripheral elements, the epithelioid cells forming them, seem to be in full activity and surrounded giant

cells of marked distinctness. The white spots were formed of a mass of cells in a mesh of connective tissue fibres.

In all these animals the lymphatic system was but little affected, the bronchial, oesophageal, and prepectoral ganglia were not swollen; in one case only were one or two little tubercles found.

Inoculation of the Goat. Seven goats were inoculated on April 20th, 1899. On post-mortem examination all of them showed tubercle in the lungs, especially in the anterior lobes, some of the granulations showing commencing caseation.

Inoculation of the Guinea-pig.—Four guinea pigs were inoculated with the same culture on April 21st, 1899; they died on June 16th with a generalized tuberculosis.

Inoculation of Cattle.—A dose of 1 c. cm. of the same culture was inoculated under the skin of the supranasal region in a heifer. A tuberculous nodule developed by degrees at the point of inoculation. The lymphatic glands in the maxillary region were slightly swollen. A long time after the inoculation the subcutaneous gumma softened and opened spontaneously. The disease did not spread to the viscera.

Inoculation of the Rabbit.—Injected into the peritoneal cavity an eruption of tubercles occurred on the epiploon, and on some points of the parietal and visceral peritoneum. Staining showed the presence of the bacillus of Koch.

The above inoculations in the guinea pig and heifer, as well as the intraperitoneal inoculation in the rabbit, were done with the object of testing the infective power of the culture, in case the intravenous inoculation should have given doubtful or uncertain results in the ass and goat. In the case in question they were superfluous. The above experiments are so many positive results against the negative results obtained by Dr. Koch.—*Char. Med. Jour.*, October, 1901.

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THE EFFECT OF DILUENTS ON MILK.

Dr. Franklin White, *Jour. Bos. Soc. Med. Sci.*, has experimented on the effects of various diluents on the coagulation and digestion of milk, and reaches the following conclusions:

(1) Dilution of milk with cereal decoctions of proper strength renders the casein curd much more fine, soft, and digestible than simple dilution with water. There is no difference in the action of various cereals, such as barley, oats, rice, or wheat.

(2) The above property is due mainly, if not wholly, to the starch in solution, the most desirable amount of starch in the milk mixture for practical use is approximately $\frac{3}{4}$ per cent.

(3) Diastase, by converting the starch to dextrin and maltose, promptly lessens and removes the action of cereal waters upon casein. Its addition, therefore, is not a practical measure when the action upon the curd is desired.

(4) Albumin water has no practical value as a diluent of milk.

(5) Lime-water added to milk has no more effect than water upon the character of the curd produced in the animal stomach.—*Merck's Arch.*, October, 1901.

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CAMPHOR IN ULCERS OF THE LEG.

Dr. Walbaum, *Munch. Med. Woch.*, No. 26, speaks warmly in favor of camphor in the treatment of leg ulcers. He uses the spirit of camphor, while others prefer an ointment. The author proceeds as follows: The leg having been thoroughly scrubbed with green soap, a moist dressing of solution of aluminum acetate is applied and renewed daily until the secretion is diminished and has become odorless. Then a wet dressing is applied every other day, using spirit of camphor instead of water. When the dressing is being changed the ulcer is cleansed with some antiseptic solution, like carbolic acid. The results have been very encouraging. Out of about forty cases not a single one could resist the treatment, which often lasted less than three weeks.—*Merck's Arch.*, October, 1901.

* * *

CAMPHOR DRESSING FOR VARICOSE ULCERS.

Camphor is a drug which for many years was held in great esteem, especially in extra-professional circles; indeed, the late M. Raspail founded a school of therapeutics which still rejoices in great popularity in France, based on the use of camphor internally and externally as a curative agent. Its anti-spasmodic properties, though well authenticated, have of late fallen into disrepute, or at any rate into disuse, and externally it is only employed in this country in the form of a liniment of which it is but a subsidiary constituent. Two German physicians have recently called attention to the value of camphor dressings in promoting the cicatrization of varicose ulcers of the legs which are notoriously refractory to treatment. They make use of an ointment containing 2 per cent. of camphor, with from fifteen to twenty parts of oxide of zinc, or, if this be found too irritating, they prescribe a mixture of two parts of camphor with forty parts of zinc oxide, and fifty parts of olive oil. An alternative application is a solution of the

drug in spirit, but this must only be applied after the ulcerated surface has been thoroughly cleaned of scabs and crusts by poultices. It is asserted that under this treatment the most obstinate ulcer will cicatrise within three weeks, which is more than is claimed for the much lauded oxygen treatment, over which, moreover, it has the advantage of being more generally applicable at a vastly smaller cost.—*The Medical Press*.

* * *

TREATMENT OF THE NASOPHARYNX IN SCARLET FEVER.

The gravity of nasopharyngeal complications in scarlatina and the importance of an active treatment need not be insisted upon. Dr. A. Seibert, *Arch. of Pediatrics*, xviii, No. 8, recommends the following mixture, to be given internally:

Tr. Iodine	$\frac{1}{2}$ dr.
Potassium Iodide	16 grn.
Distilled Water	4 oz.
Carbolic Acid	10 dr.

A teaspoonful every hour.

This medicine, slowly swallowed in reclining posture, achieves a superficial disinfection of the pharynx. A child of one year and older may safely take this mixture for four to five days in succession. Intoxication with carbolic acid has never been observed in the author's experience of twenty years. Mild symptoms of iodism have been noted, but usually disappeared quickly.

For the purpose of cleansing and disinfecting the mucous surface in scarlatinous nasopharyngitis, Dr. Seibert employs irrigations of 1 to 5 per cent. warm solution of ichthyol. Half a pint is allowed to flush the nares and pharynx every six hours. The solution is injected from a fountain syringe, held about three feet above the patient. This method is very efficient in cases where the parts are not so swollen as to obstruct the flow of the fluid into the pharynx. When the obstruction is present, however, a more energetic course of action is indicated. For these cases the author uses a 50 per cent. solution of resorcin in alcohol, applied locally to the nasopharynx by means of a cotton carrier. One such application daily will suffice and the treatment is applicable to the youngest infants. The underlying principle of the author's methods is the attempt to destroy the bacteria of scarlatina wherever they are accessible. Following the same idea, he advises inunctions of an ichthyol wool-fat ointment for the dermatitis of scarlet fever.—*Merck's Arch.*, October, 1901.

REMOVAL OF HAIRY TUMOR FROM THE STOMACH WEIGHING 23
OUNCES—SPECIMEN—RECOVERY. BY DR. H. A.
BRUCE, TORONTO, AT CANADIAN MED.
ASS'N., AUGUST, 1901.

The subject of the case was a woman aged 26; she had been married six years, and had two children. A lump was noticed in the abdomen two months previous to the birth of the last child. Patient had no symptoms. The lump was about five inches in width, and it could be lifted forwards. It reached to within three inches of the umbilicus. It gave the patient no special discomfort, there being absolutely no symptoms present. Dr. Bruce advised exploratory incision. This was done on July 22nd last, at St. John's hospital, Toronto. On opening the abdomen in the middle line the spleen and kidneys were found in normal condition, but there was a large mass in the neighborhood of the stomach. The surgeon could make out the mass lying free in the stomach, a portion extending through the pyloric end of the stomach. An incision was made into the stomach and the mass removed. After removing the mass of hair, the opening of the stomach was closed in the usual way. Hot salt solution was given every two hours and nutrient enemata every six hours. Twenty-three hours after the operation sips of hot water were given by the mouth. Forty-eight hours after operation patient was given one half an ounce of milk and lime water every hour. She left the hospital on the twentieth day. The tumor was entirely of hair exactly the same color throughout and the same color as the hair on her head. It was 24 inches in length, being about 2 inches in diameter at one end and gradually tapering to a point at the other. Dr. Bruce considered this case rare, but offered no solution as to how the hair got into the stomach. There were no evidences of hysteria present in the patient. There are some specimens of hairy tumors in the McGill Museum at Montreal.—*Canadian Med. Rec.*, September, 1901.

* * *

Dr. B. Merrill Ricketts presented the following specimens before the Academy of Medicine of Cincinnati, on June 24, 1901:

1. *Wire Mattress (Phelps' Hernia Operation).*—This specimen is a dog's belly in which a mattress of silver wire had been placed fourteen days before the dog's life was taken. The tissue had grown through the meshes of the mattress, forming an impervious wall. Silkworm-gut, kangaroo tendon, cat-gut and wire were used for sutures, and can be seen in their respective places,

demonstrating the comparative life and usefulness of these materials for sutures. The cat-gut evidently became useless two or three days after insertion, while the kangaroo tendon lasted much longer.

2. *Gall Stones*.—Woman, age fifty-four, suffered many years. Entire right abdominal wall was hard, indicating pus. Stools never clay-colored. Temperature 101 degrees. Preponderance of evidence in favor of appendicitis. No icterus. She was frail, weighing less than one hundred pounds. Condition such as to question the advisability of an operation. Chloroform used and an incision made a little above that for appendicitis. A cavity found in region of the gall-bladder, extending downward, containing half pint of thick, non-offensive pus. A gall-stone weighing 285 grains, which had sloughed through the gall-bladder and which was surrounded by dense adhesions, was found in this cavity. Temperature never reached 100 degrees, convalescence rapid.

Woman, age seventy, weighing 225 pounds. Suffered several years with severe pain in region of gall-bladder. Icterus intense, clay-colored stools. Cholecystotomy revealed a ball-valve stone in the common duct, which was divided and removed in fragments; weight of stone twenty-two grains. Recovery uninterrupted.

Woman, age twenty-one. Typhoid fever eighteen years previous. Extreme icterus, clay-stools. Severe and frequent paroxysmal pains. Cholecystotomy. Gall-bladder contained two ounces of light albuminous fluid; sound revealed stone in common duct, small fragments of it removed with curette. The stone itself disappeared into the hepatic duct and could not be found thereafter. Frequent soundings have failed to reveal it. I should explain that it was a ball-valve stone. Stools are all clay-colored since operation. Most of the bile escapes through the external opening. Icterus disappearing and patient is rapidly convalescing.

3. *Hematoma of Ovary*.—Patient, age twenty-four, weight about ninety pounds. One child. Excruciating pain in right ovary. A median incision revealed a large cyst upon the left ovary and a hematoma on the right, containing half an ounce of blood. A large appendix containing pus was removed. Time of operation, nine minutes. Patient's temperature never exceeded 99 degrees. No pain. No medicine of any kind administered. Began to vomit stercoraceous matter seventy-five hours after operation, and died at the end of eighty hours from ileus.

A number of beautiful photo-micrographs illustrating rare parasites, fungi, and malignant growths were exhibited. The most interesting of these photo-micrographs was one of karyokinesis of leukocytes, the first to be observed in a laboratory.—*Cincinnati Lancet-Clinic*, October 5, 1901.

* * *

TREATMENT OF PILES BY POSITION.

Oeder (quoted in *British Medical Journal*, March 9, 1901) asserts that a patient can usually be kept quite free from distressing symptoms, and so saved the necessity of being immediately operated on, by lessening the pressure in the hemorrhoidal veins by raising the buttocks until the anus (and thus the plexus) occupies a higher position than the inferior vena cava and the heart. He places two wedge-shaped pillows or bolsters with their bases toward the foot end, about 20 inches from the head end of the bed. The two wedges lie on top of one another, making an elevation of some 16 to 18 inches. The patient lies with his buttocks at the highest point of the wedges on his back, but he finds that the body weight reduces the elevation by some 10 inches. The head must be placed against the head end of the bedstead. This comfortable position may be varied by a half abdominal and a half right-sided position, in which he suggests that the left leg be flexed and the knee brought up onto the wedges. In ordinary cases he finds that it is sufficient to employ this position merely at night, and states that these cases react well if the position be repeated for two or three nights. In severe cases it is necessary to keep the patient in bed in this position for some days. At the same time local applications can be resorted to.—*Ther. Gaz.*, Oct. 15, 1901.

* * *

In the suffocative stages of asthma the following is recommended:

℞	Tincturæ lobeliæ	℥ss
	Tincturæ sanguinariæ	℥ij
	Olei menthæ viridis	℥ss
	Syrupi empyreumatici	℥v

Sig: Half a teaspoonful every two hours.

Let us keep in view the broad lines of this affection: (1) Its local cause, which we should endeavor to detect and remedy; (2) its predominant feature of hyperesthesia, which we must reduce by the least damaging agents; (3) its inherent feature of delicacy for which a well-planned hygiene is the best medicine.

The hyperesthesia has been helped by the use of paraldehyd and orthoform, while chloroform inhalation generally gives relief at the moment.

EMPLOYMENT OF SUPRARENAL EXTRACT BY THE OCULIST.

L. Thilliez (*Journal des Sciences Medicales de Lille*, September 14, 1901) has met with the happiest results in his use of suprarenal extract in ocular affections. The solution he uses is composed of equal parts of distilled water and the dried suprarenal powder, which is carefully sterilized and preserved in glass receptacles holding 1 gr. It is a brownish liquid, which is preserved indefinitely as long as the tube is closed. The results are constant. The profound anæmia which is induced in the conjunctiva by its use lasts for one or two hours, according to the individual and the quantity used. Its vasoconstrictor action is especially marked on the conjunctival vessels, but is also seen in the sub-conjunctival or episcleral vessels, and to a slight degree in the deep vessels. The use of this drug is most valuable in intense conjunctival injection. It is useful in cases of keratitis and iritis with injection. Its use has been followed by excellent results in the treatment of glaucoma.—*Med. Rec.*, Oct. 12, 1901.

* * *

FOREIGN BODY IN THE EAR.

Almost any object can be removed by syringing. A strong piston syringe is often required, but a high-grade bulb syringe may answer. In obstinate cases put the canal on a stretch by pulling the ear firmly upward and outward while the stream is being forcibly injected.—*Med. Rec.*, Oct. 12, 1901.

* * *

Heinrich Stern (*Am. Med.*) has investigated the question as to whether the gouty and kindred phenomena may disappear after vaccination. He reports two experimental inoculations. The gouty pains disappeared in both instances. And he mentions that the same may stand as the foundation of many affections which are clinically regarded as gout, rheumatism and neuralgia. Since vaccine lymph hardly possesses solvent or eliminating properties, he regards the reaction as secondary or indirect.—*Med. Times*, October, 1901.

* * *

A SOURCE OF SYPHILITIC INFECTION.

Dr. Albert S. Ashmead (*Pub. Health*, October, 1901), says:

It is interesting to mention that it is an historical fact that in the twelfth century children were forbidden the communion on account of the dangers of disease introduced into Europe from the East by returning armies of the Crusaders. Then syphilis was spread to Western Europe as much by the communion cup as by

the brothel. No more dangerous object of transmission can be imagined among those christian zealots returning from their fanatical pilgrimage to the sepulchre of Christ, than the common communion cup. It spread so fast that it made us believe that the disease was of an epidemic nature.

To-day, in syphilitic Japan, those who call themselves Christians are considering the displacement of the christian wine cup common in our Lord's supper, by the "Buddhist's" tea cups. Wine or tea, what matters it where the water is filthy.

In 1894, when I wrote a letter on the subject to the *New York Sun*, I was criticised for stating that a syphilitic had appeared at the communion table with me. He was my patient, and knelt beside me. His mouth was full of mucous patches. In consequence I refused to drink from the same cup with him.

In the popular mind all syphilitics are, in every respect, and to the very core of their being, immoral, and shun the society of good people. Even the idea that some of them might add to the sum of their wickedness, hypocrisy—even that simple, obvious idea did not occur to my critics. The church at which I knelt at the altar with those diseased persons, was an Episcopal Mission Church, and with whom should such a church have more usual dealings than with *sinner*s of all kinds? It did not strike those critics either, or rather they did not know that syphilis may afflict many moral and mentally pure persons, who may have caught it by contact with some tainted object.

As to the tuberculous, we have them always with us in our most moral and devout congregations. But of course it is the business of the clergy to stand for their cup, *envers et contre tous*.

Dr. Terry, the originator of the individual communion cup discussion, in his paper, read January, 1887, said: "It is not best to be over fastidious, but as medical science in its progress for the better, detects objectionable features in our forms and customs, we should yield to the prestige of incontrovertible facts. The aim of the true physician is to prevent disease, and whether it be necessary to criticise the saloon or the church, he should not hesitate to do his duty, even if millions scorn and ridicule him."

I merely add, that the communion cup would prove a *disaster* in syphilitic Japan. The attempt to introduce it will prevent the acceptance of Christianity there.

* * *

CRAMPS OF THE LEGS.

Dr. John McDonald, after discussing the causation of cramps, their relation to the valveless condition of the inferior vena cava,

and consequent great hydraulic pressure, to constipation with its pressure on the iliac veins, and to the gouty diathesis leading to the deposit of urates in the muscles surrounding the congested veins of the legs, says that in the remedial treatment of cramps, the attention should be directed mainly toward (1) the relief of constipation; (2) the removal of the uric acid toxin; and (3) the establishment of a better nutrition.

It is obvious that for this purpose an effective cholagogue agent is of the first importance to stimulate cellular action of the liver; increase its normal secretions, and initiate peristalsis; and that, combined with an appropriate uric acid solvent, the circulation of the blood may be quickened, while at the same time its subalkalinity may be utilized and oxidation increased by the removal of the toxin mainly responsible for the abnormal condition.

A more active interchange having thus been established between blood and tissue, the former being better enabled to perform its function of removing poisonous waste, the nutrition of the latter becomes improved, and the third indication is fulfilled. The author records a case of obstinate cramps treated successfully on these lines.—*Northwestern Lancet*.

* * *

CEDRON IN YELLOW FEVER.

The Marine Hospital Bureau has issued a bulletin as to the use of cedron seed in yellow fever, as practiced by Dr. S. H. Hodgson, of the Navy.

Dr. Hodgson says that a tincture or fluid extract of the seed of cedron is made by many persons in Central and South America and given as a specific antidote to persons suffering from stings or bites of insects or snakes. While at Jiminez, Costa Rica, he attended nine laborers who had yellow fever. He gave them a tincture of the cedron seed. This tincture he made himself. It was of uncertain strength. He employed hypodermic injections of about twenty minims three times a day. All the patients recovered. The drug promptly relieved the headaches and stopped the nausea. He firmly believes that this remedy will cure yellow fever.—*Med. Times*, October, 1901.

* * *

GLYCOSURIA IN WHOOPING COUGH.

In the Glasgow Hospital Reports, Thomson, drawing conclusions from 7,370 urinary examinations in 82 patients, states that dextrose is commonly present during the spasmodic stage of this disease.—*Cincinnati Lancet-Clinic*.

TREATMENT OF ULCERS OF THE FOOT BY PROTEID BACTERIA.

Honl and Bukovsky (*Centralblatt für Chirurgie*, No. 11, 1901), treat ulcers of the foot and leg by compresses moistened in a plasma derived from the growing bacillus pyocyaneus; this they call pyocyaneus protein, and with it they treated one hundred ulcers.

The compresses were reapplied two or three times daily. There was no effect upon the general system, nor was irritation noticed in the skin surrounding the ulcer. Within twenty-four hours the secretion was diminished. In one to ten days, the ulcer presented a healthy granular appearance, after which the skinning process began, and was progressive and uninterrupted until complete recovery.

The authors hold that the toxin of the bacillus pyocyaneus can cure every ulcer, no matter what its condition. They note that in Janovsky's clinic a two-months' treatment in each of five years cured not over sixty per cent. at the best, whilst by the toxin therapathy, treatment for a considerably less length of time cured ninety per cent.—*Med. Times and Reg.*, October, 1901.

* * *

CARBOLIC ACID IN THE ECZEMAS.

In a recent article Shamberg contributes the following formulas (*Therapeutic Gazette*):

The following is recommended for cases of pruritic eczema:

R	Acidi carbolic	.....	gr. xxx
	Acidi borici	.....	ʒj
	Glycerini	.....	ʒj
	Tinci oxidi	.....	ʒij
	Aquæ	.....ad	ʒvi

Hebra advises for chronic scaly eczema on the face:

R	Acidi carbolic	.....	ʒij
	Glycerini	.....
	Etheris	.....aa	ʒj
	Spt. vini rect	.....	ʒvj

For vesicular eczema and eczema rubrum the author uses a phenol calomel paste:

R	Acidi carbolic	.....	gr. x
	Hydrarg. sub. chlor	.....	gr. xx
	Pulv. amyli	.....
	Zinci oxidi	.....aa	ʒij
	Petrolati	.....	ʒiv

In other cases of subacute eczema the carbolic acid may be used with a diachylon ointment:

R	Acidi carbolici	gr. x
	Plumbi oxidi	3j
	Petrolati	
	Adipis lanæ	aa 3iv

The following is a useful antipuretic ointment in cases of papular and squamous eczema:

R	Menthol	gr. v-x
	Acidi carbolici	gr. x-xx
	Ungt. aq. rosæ	3i

In chronic papular eczema with infiltration:

R	Hydrarg. perchlorid	gr. ii
	Ac. carbolici	gr. xx
	Ungt. zinc oxid	3i

* * *

FOR ZONA.

The *Journal des praticiens* for September 14th gives the following formula:

R	Tannic acid, Bismuth subnitrate,	
		of each .....30 grains

R	Zinc oxide, Starch,	
		of each .....75 grains

M.

If powders seem to irritate, Kaposi recommends the following formula for a paste:

R	Yellow wax	150 grains
	Olive oil	450 grains
	Watery extract of opium	6 grains

M.

Lestikow, in his *Maladies de la peau*, speaks highly of the following ointment:

R	Boric acid	37½ grains
	Cocaine hydrochloride	7½ grains
	Vaseline	330 grains

M.

The surface should always be covered with cotton or gauze.—

N. Y. Med. Jour., Oct. 12, 1901.

* * *

OIL OF TURPENTINE IN RINGWORM AND PITYRIASIS.

Leven (*Journal des maladies cutanees et de syphilis*, April; *Treatment*, recommends the rubbing in daily for five minutes of oil of turpentine in pityriasis versicolor. In ringworm the oil is applied night and morning on pieces of linen. Inflammation occurs after six days, and the epidermis exfoliates; the patches are then healed by simple ointments.—*N. Y. Med. Jour.*, Oct. 12, 1901.

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No. 1.

Editorial.

WHAT IS THE MATTER WITH ASHMUN FOR SCHOOL DIRECTOR?

Citizens of Cleveland who take any interest at all in the public schools are pretty thoroughly disgusted with their present management. Honesty, common sense and executive efficiency, the qualities most needed at school headquarters have become very conspicuous by their absence. As merely one instance out of many bearing on the first count, we will mention that notorious bargain with the book trust. As a small example of the second lack, recall that absurd, unnecessary and unwise promul-

gation in regard to religious instruction in the schools—a question that common sense would have told any ordinarily bright set of men never should have been raised at all. As to general inefficiency, the present administration has given such numerous evidences that the bare history of any single month or meeting would afford plenty of instances. There never has been a time when either our present school director or certain members of our present school council have given evidence of possessing a comprehensive grasp of the plan and the needs of the public schools in this city, or shown a disposition to honestly advance the schools or comply with the wishes of the people in regard to them. Have not the purchase and sale of lands, the erection of buildings and the awarding of contracts and the distribution of patronage again and again been very questionable as to their integrity and extremely short-sighted in their policy? What can be said in defense of the scheme of forcing free text books upon people who don't want free text books, but who do want more school houses, and want them badly? At the opening of the school this fall there were at least four thousand five hundred children going to school in attics, basements, rented quarters or rooms improper for school purposes; but the director and his friends of the council were for spending thousands of dollars of the people's money to give them free text books which they were able to supply for themselves. Are these honest and efficient public servants?

What can be said in defense of Councilman Clark's scheme to have the director appoint three medical inspectors of the schools whose duty it should be to draw a salary of \$1,500 a year and report to the director the hygienic needs of the schools and sanitary state of the buildings? It was conclusively shown by the Cleveland Medical Society's Committee on School Hygiene that the supervisor of school hygiene had informed the director and the council of very many shortcomings in regard to sanitation in the schools and school buildings, and that many physicians throughout the city had imparted and were ready to impart still more information along that line, but had always been met with the excuse that there was no money available to spend on sanitation. The director and the gentlemen of the council were called upon to answer why they sought to appoint three more men and expend \$4,500 to be told about faults in sanitation that they already knew about but had no money to correct? We have no personal grudge against any one at school headquarters, nor do we want for our-

selves or our friends any favor within their gift, but in the interest of the schools, of the children for whose benefit they were devised, the city and the republic whose citizens these children are to become, we want to see the right men put into their right places and the affairs of the schools faithfully and capably conducted.

We need a man at the head of the School Department who will have some comprehension of the enormity of trifling with the lives and health of the thousands of school children in this city while those in authority are spending their time in political machinations in finding places for their henchman, in making absurd contracts at extravagant prices often evading the laws in so doing, in furnishing themselves luxurious offices, and in juggling their accounts to hide their misdoings from the public.

We need in the office of School Director a man experienced in city affairs, intelligent and honest, well known to the citizens of Cleveland and well acquainted with the needs of our schools. Such a man is Dr. George C. Ashmun. He made a good, clean record during his ten years as Health Officer, as well as in the City Council. He is widely known as a sanitarian, and he stands well in the medical profession.

We are speaking without regard to his party affiliations, but believe that he should be nominated on his fitness for the position of School Director, and that without regard to party ties the medical profession and all good citizens should see to it that his merits are duly recognized, and that he is elected.

Then with a few changes in the personnel of the school council, in which also the profession might interest itself to advantage, public school affairs would emerge from their present distressing condition and be conducted upon a plane which their vital importance demands.

SAMUEL W. KELLEY.

CRITICISM OF THE LATE PRESIDENT'S PHYSICIANS.

We regret to see a tendency in certain quarters to criticise the medical treatment of our late President.

Such criticism is as much out of place as it is uncalled for and is a product of the most brazen effrontery, showing either motives of a vindictive and unworthy order, or else giving evidence of a colossal conceit so pronounced that it closely resembles absolute ignorance.

Fortunately the bumpiousness of these self appointed critics is so apparent that their flippancy injures only themselves.

It is refreshing to turn from such sickly criticism to the wholesome account of the medical aspect given by a lay author in the November number of Pearson's Magazine. The matter is so well and concisely put that we take the liberty of making the following quotations: "Within thirty minutes after the attack upon the President two specialists in operations of this kind were at hand, and another was on his way as fast as a special train could carry him. To these surgeons the President's wounds conveyed a single imperative demand: "Instant action." No governmental red tape now; no halting for consultation or the voice of vested authority; but coats off, and to work to save the most valued life in the country! The President was ready as he had been ready at every emergency in his career. "Do whatever you think necessary, gentlemen," he said. That was his calm assent to an operation from which he knew that he might not emerge.

The rapidity with which the operation was performed stands as a record of quick work in surgery. If prompt action could have saved him, the President would be alive still. Science did its utmost, but without the co-operation of Nature it was helpless. * * * The case of President McKinley was remarkable in its medical aspects. The rapid apparent improvement of the patient and his evidence of swiftly returning strength seemingly misled the physicians themselves into believing that he was on the way to recovery.

The actual conditions revealed by the death of the President proved that the symptoms that had caused the previous encouragement were altogether deceptive. There had been no slightest effort on the part of the bodily faculties to repair the damage that had been done. How it happened that Mr. McKinley seemed to be gaining so rapidly when really he was moving swiftly nearer and nearer to the grave the physicians themselves have not fully explained.

G. S. S.

THE DECLINE OF MATERIA MEDICA.

With the rapid multiplication of chemical firms manufacturing compressed tablets and medicines ready to use, it naturally follows that prescription writing is becoming less and less a necessary part of the physician's armamentarium.

It is far easier and more convenient to dispense medicine from neatly labelled bottles than it is to bear in mind the doses, physio

logical action and incompatibilities of the various drugs of the pharmacopœia, and indeed such knowledge is rapidly becoming unnecessary, at least so far as *dispensing* drugs is concerned.

The system is so nicely reduced now, moreover, that mental calculation may be very nearly disposed of. The physician can supply himself at comparatively small expense with medicines containing such convenient labels as: Migraine, dysmenorrhea, constipation, dyspepsia, coryza, cystitis, tonsillitis or menorrhagia tablets No. 1, 2, 3, 4, etc.

With the adoption of such a system it is but natural that the less ambitious, enterprising and scientific of the profession gradually lose what command of materia medica they may have once possessed, and in the slow process of evolution finally become mere machines in the routine practice of handing out pills without care or thought regarding the physiological action or individual dose of the ingredients.

As scientific medicine depends not only upon a thorough and intelligent understanding of the physiological action of drugs, but upon the ability to arrive at a correct diagnosis as well, we believe that this ready-made-diagnosis-with-treatment-attached system is in danger of reducing many of the profession to the plane of mere pharmacal automatons, and in opening wide the doors to others of unscientific training who may never have acquired any further medical knowledge than that of the names of diseases.

The convenience and business acumen, therefore, of supplying drugs from the office, while it has many commendable features, is not altogether without its evil, and may become absolutely harmful.

G. S. S.

New Books.

PROGRESSIVE MEDICINE, VOL. III., September, 1901. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M. D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Octavo, handsomely bound in cloth, 428 pages, 16 illustrations. Per annum, in four cloth-bound volumes, \$10.00. Lea Brothers & Co., Philadelphia and New York.

This volume contains Diseases of the Thorax and its Viscera, including the Heart, Lungs, and Bloodvessels, by William Ewart, M. D., F. R. C. P.; Dermatology and Syphilis, by William S. Gottheil, M. D.; Diseases of the Nervous System, by William G. Spiller, M. D.; Obstetrics, by Richard C. Norris, M. D.

It will prove of more than usual value to the general practitioner. Dr. Ewart presents the most recent views on Pneumonia, Tuberculosis, and other conditions of the Respiratory Tract. The advances in the treatment of Pneumonia and Phthisis have been so remarkable in the past year that this section will be read with especial interest. The surgical treatment of various affections of the Lungs and Pleura has been extended of late in a manner which opens a field which gives promise of great benefit to sufferers from these conditions. In the consideration of the diseases of the Heart and Blood-vessels Dr. Ewart discusses very fully the recently exploited forms of treatment by baths medicated and otherwise.

The section on Dermatology and Syphilis by Dr. Gottheil, besides giving the most advanced information concerning the ordinary problems presented in those subjects, discusses very fully the new and important subject of Photo-therapy and the Finsen Light treatment: Blastomycetic Dermatitis, and Inoculation Tuberculosis.

In the section on diseases of the nervous system Dr. Spiller devotes a large portion of his space to an able discussion of tumors and abscesses of the brain. He also describes the commoner forms of the peculiar nervous diseases which are sometimes so puzzling to those who have not made a special study of neurology.

In Obstetrics Dr. Norris discusses very fully the treatment of Eclampsia. He gives also the most recent views on the subject of Symphysiotomy and discusses the large number of recently reported cases in which Lumbar Anesthesia has been employed in obstetric practice.

ORAL SURGERY. A Text Book on General Medicine and Surgery as applied to Dentistry. By Stewart Le Roy McCurdy, A. M., M. D., Author of "Manual of Orthopedic Surgery," Pittsburg, Pa. Professor of Anatomy and Surgery, Pittsburg Dental College, Surgeon P. C. & St. L. Ry., Member American Medical and American Orthopedic Associations, Orthopedic Surgeon Presbyterian Hospital, etc. Copyright 1901 by the Calumet Publishing Co., Pittsburg, Pa.

A book of three hundred and sixty-four pages, meant primarily as a text-book for dental students. The whole of the work is not devoted entirely to oral surgery, as its first part treats of general surgical principles, shock, diagnosis, principles in operations, etc., in a concise yet thorough manner that easily fits the requirements of the dental student. The second part applies itself

entirely to oral surgery and should appeal strongly to the general surgeon, as he will find in compact form almost everything relating to injuries, neoplasms, and congenital malformations about the mouth that would entail the expenditure of much time to gather from the larger and more exhaustive works on surgery. The chapter on hair lip and congenital deformities of the hard and soft palate is especially good, while the illustrations (good wood cuts) add much in conveying a proper understanding of the technique employed in their treatment. Nothing will bring so forcibly to mind the immense strides in dentistry during the last fifty years, as a comparison of the requirements of that time to practice dentistry, with those of the present time. A fair idea of the high grade of instruction in this branch of surgery is gained when we recognize this work as a representative example of the dental text-book of to-day.

A TEXT BOOK OF GYNECOLOGY. Edited by Charles A. L. Reed, A. M., M. D., President of the American Medical Association (1900-1901); Gynecologist and Clinical Lecturer on Surgical Diseases of Women at the Cincinnati Hospital; Fellow of the American Association of Obstetricians and Gynecologists; Fellow of the British Gynecological Society; Corresponding Member of the National Academy of Medicine, of Peru, etc. Illustrated by R. J. Hopkins, New York. D. Appleton & Co. 1901.

Very few books which have appeared during the last year have received as hearty indorsement at the hands of the different medical journals throughout the country, as this one. Thirty-one contributors of national reputation have helped to make it complete in every detail. No work of like magnitude and later date advances in gynecology could have been compiled by any one man and for this reason the assignment of topics was made to men who had already received recognition along their special lines of research. The painstaking effort on the part of the editor to include only such information as would be unquestionable will be recognized when the reader learns that of the fifty-three chapters, thirty-three are the best efforts of more than one of the collaborators, and only twenty chapters have been assigned to any one writer exclusively. This is a new book in every sense of the word, as the illustrations alone will prove. They are original and show a thorough anatomical comprehension on the part of Mr. Hopkins, the artist, while the old stereotyped illustrations which appear in five out of every six gynecologies are found "conspicuously

wanting." The names of the collaborators will go far to make it popular, and nothing but a bright future and permanent place amongst the standard later date works can be predicted for it. Cleveland physicians will be pleased to learn that their city is most creditably represented by Drs. Hunter Robb and T. C. Martin. The latter, who has done much to simplify the study of proctology by perfecting the technique as well as the instruments of examination, has contributed liberally and added very materially to the value of the book. The chapter devoted to "Symptoms and Diagnosis of Salpingitis," by Dr. Robb, is written in a masterful way and in the estimation of the reviewer surpasses even his previous well-known and widely read writings. As a text-book it should meet with universal approval, since it is concise, is edited and written in a manner easy of comprehension, and embodies the best ideas of our leading gynecologists.

THE PRINCIPLES AND PRACTICE OF MEDICINE. Designed for the use of Practitioners and Students of Medicine. By William Osler, M. D., Fellow of the Royal Society; Fellow of the Royal College of Physicians, London; Professor of Medicine in the Johns Hopkins University and Physician-in-Chief to the Johns Hopkins Hospital, Baltimore; formerly Professor of the Institutes of Medicine, McGill University, Montreal; and Professor of Clinical Medicine in the University of Pennsylvania, Philadelphia. Fourth edition. D. Appleton & Co., New York. 1901.

The author's name in itself is sufficient recommendation for the latest edition of his work on Medicine. Many and important changes have been made in this edition. The article on Typhoid fever has been in great part rewritten, as has also that upon Malaria, Dysentery, Yellow Fever, and the Plague, Pneumonia, Diphtheria, Smallpox, Cerebro-Spinal Fever, Rheumatic Fever, Diabetes, Gout, Obesity and Arthritis Deformans have been brought up to date to meet the rapid progress of the day.

Practically new articles in whole or in part are those on Acute Tuberculosis, Diseases of the Pancreas, Splenic Anæmia, Arsenical Poisoning, Herpes Zoster, Adiposis Dolorosa, Fibrinous Bronchitis, Albumosuria, Oxaluria, Meniere's Disease, Aphasia, Combined Sclerosi of the Cord, Myasthenia, Gravis, Congenital Aneurism, Surgical Treatment of Aneurism and Scurvy. Many minor changes, too numerous to mention, have been incorporated in order to bring the work thoroughly abreast of the times.

REPRINTS RECEIVED.

On the Advancement of Surgical Pediatrics. By Samuel W. Kelley, M. D., Cleveland, O. (Reprint from *Journal of American Medical Association*.)

Evolution of the American Medical College. By Albert R. Baker, M. D., Cleveland, Ohio. (Reprint from *Bulletin of the American Academy of Medicine*, Vol. V., No. 7.)

Roentgen Rays in the Treatment of Diseases of the Skin. A Review of Recent Literature and a Personal Experience. By William Allen Pusey, A. M., M. D., Chicago, Ill. (Reprinted from *The Journal of the American Medical Association*, Sept., 1900.)

The State of the Gastric Secretions in Chronic Rheumatism and Rheumatoid Arthritis. By Frank H. Murdoch, M. D., Pittsburgh, Pa. (Reprint from *The Medical News*, New York, Aug. 3, 1901.)

May a Hospital Steal Cases? By Dr. A. L. Benedict, Buffalo, N. Y. (Reprinted from *American Medicine*, May, 1901.)

Arterio-Sclerosis; The Greatest Foe of the Life Insurance Company. By Talbot Jones, M. D., St. Paul, Minn. (Reprint from *The Medical Examiner-Practitioner*, June, 1901.)

The Diagnosis of Ectopic Pregnancy Before Rupture, Based on Eleven Cases. New Method of Nephrorrhaphy. Uretero-Vesical Implantation—Three Cases. The Technique of Nephro-Ureterectomy. Three Cesarian Sections—Recovery. Complete Inguinal Extraperitoneal Hernia of the Bladder—Recovery. Operating Under X-Rays. Broad Ligament Flap to Close Opening in Rectum. Enormous Gall-Stones with Ovarian Cyst and Uterine Fibroid. Inversion of the Uncut Appendix. A Device to Prevent the Miscount of Sponges. By J. F. Baldwin, A. M., M. D., Columbus, Ohio.

Animate Bodies in the Auditory Canal. By J. M. Ingersoll, A. M., M. D., Cleveland, O. (Reprint from *THE GAZETTE*, May, 1901.)

Our Recent Epidemics of Smallpox and the Failure of Glycerinated Lymph. By F. J. Runyon, M. D., Clarksville, Tenn. (Reprint from *Memphis Medical Monthly*, August, 1901.)

Notes on Ringworm. By A. Ravogli, M. D., Cincinnati, O. (Reprint from the *New York Medical Journal*, June 29, 1901.)

A Case of Erythroderma Squamosum. By A. Ravogli, M. D., Cincinnati, Ohio. (Reprint from *The Journal of the American Medical Association*, July 13, 1901.)

Tuberculosis of the Skin. By A. Ravogli, M. D., Cincinnati, O. (Reprint from *The Cincinnati Lancet-Clinic*, October 6, 1901.)

The Gonococci in the Gonorrheal Secretion. By R. A. Ravogli, M. D., Cincinnati, Ohio. (Reprint from *Louisville Journal of Medicine and Surgery*, May, 1901.)

Multiple Nodular Melano-Carcinoma of the Skin from a Naevus. By A. Ravogli, M. D., Cincinnati, Ohio. (Reprint from *The Journal of Cutaneous and Genito-Urinary Diseases*, June, 1901.)

Syphilis as a Non-Venereal Disease—With a Plea for the Legal Control of Syphilis. By L. Duncan Bulkley, A. M., M. D., New York City. (Reprint from *The Journal American Medical Association*, April 16, 1901.)

Congenital Dislocation of the Hip-Joint, with Especial Reference to Lorenz's Bloodless Reduction. By Walter G. Stern, M. D., Cleveland, O. (Reprint from *Cleveland Journal of Medicine*, March, 1901.)

A Contribution to the Bottini Operation for the Radical Relief of Prostatic Obstruction. By L. Bolton Bangs, M. D., New York. (Reprint from *The Medical Record*, March 9th, 1901.)

The Care of Patients During Surgical Operations; With Some Methods of Preventing Shock and Infection. By Fenton B. Turck, M. D., Chicago. (Reprint from the *Medical Record*, August, 1900.)

Imperfect or Deficient Urinary Excretion as Observed in Connection with Certain Diseases of the Skin. By L. Duncan Bulkley, A. M., M. D., New York City. (Reprint from the *Journal of Cutaneous and Genito-Urinary Diseases*, March, 1900.)

Correspondence.

COLLECTIVE INVESTIGATION OF THE INFLUENCE OF THE SILVER NITRATE INJECTIONS ON PHTHISIS.

To the Members of the Medical Profession:

In 1892 the undersigned began a collective investigation of the action of cold in the treatment of acute pneumonia and there is reason for believing that this procedure which resulted in gathering four hundred cases of this disease thus treated, with a death rate not quite five per cent., was an important factor in calling attention to the utility of that treatment, and in introducing it

to the profession of this country. That research was based on the conviction that no remedy can be called truly successful until it has passed the exacting crucible of clinical experience, and it is now proposed to apply the same ordeal to the silver-injection treatment of phthisis, which, in a large hospital, dispensary and private practice, reaching over a period of three years, and during which many thousand injections were administered, has given me greater satisfaction than any other method that I have ever employed. In keeping with the above expressed feeling a cordial invitation is herewith extended to those members of the profession who have the inclination and opportunity to investigate this method of treating phthisis and to whom a reprint on the subject with full information and blanks to report cases, will be cheerfully sent on application.

THOMAS J. MAYS, M. D.

1829 Spruce Street, Philadelphia, Pa.

Notes and Comments.

Dr. B. O. Coates has returned from a vacation in Toronto.

Dr. S. W. Kelley spent a week in Buffalo during October.

Dr. D. B. Steuer is at present attending hospitals in Vienna.

Dr. H. G. Sherman is enjoying a vacation trip to New Mexico.

Dr. Howard S. Straight was out of town a few weeks during October.

Dr. W. H. Humiston spent a few weeks in New Mexico during October.

Dr. H. W. Quirk has left Cleveland and is now located at Jersey, Ohio.

Dr. A. R. Baker has returned from Villa Beach and is now living at 749 Logan avenue.

Dr. and Mrs. J. P. Sawyer occupied "Happy Home" cottage at Gates Mills during October.

Dr. John N. Lenker was confined to his home for a week in October with an infected hand.

Dr. and Mrs. F. A. Payne, 89 Quinby avenue, spent a few weeks in the East during October.

Dr. Forchheimer will address the Cleveland Medical Society on November 22d. Subject, "Some Medical Aspects of Sepsis."

Dr. M. Metzenbaum has returned from Vienna and Budapest and is located at 1117 Case avenue.

Dr. C. A. Hamann has removed his office and residence from 744 Prospect street to 661 Prospect street.

Dr. Robert E. Ruedy has left Cleveland to accept a position as neurologist to a sanitarium in New York state.

Dr. M. J. Lichty, recently of Alliance, O., is now located at the corner of Genesee and Hough avenues, this city.

Dr. Clyde E. Cotton formerly of Cleveland, Ohio, announces to the profession that he will open on October 15, 1901, a small sanitarium at Black Mountain, North Carolina, for the treatment of cases that need the care of such an institution and the invigorating climate of the mountains of western North Carolina.

The Union Medical Association of Northeastern Ohio meets in Massillon on 12th November.

The City Hospital staff held its quarterly meeting on 15th October. Important business was discussed.

The Medical Tribunal held its sixth annual meeting in the Grand Army hall, Alliance, O., on Thursday, 24th October.

H. H. Hessler & Co. have, owing to largely increasing business, found it necessary to enlarge the firm. It has recently been incorporated and is now known as The H. H. Hessler Co.

The Rio Chemical Co., formerly of St. Louis, is now located at 56 Thomas St., New York. The business of the company has grown to such proportions that better facilities were desired for purchasing and shipping, also it was desirable to be more in touch with the foreign offices of the company.

The governors of the New York Skin and Cancer Hospital announce that Dr. L. Duncan Bulkley will give a fourth series of clinical lectures on Diseases of the Skin in the Out-Patient Hall of the hospital on Wednesday afternoons, commencing November 6th, 1901, at 4:15 o'clock. The course will be free to the medical profession.

Bill Nye in a Hospital.—I have just been sent to the hospital for twenty days. My physician did it. He did it with an analysis. Anybody who amounts to anything nowadays gets analyzed.
. . . I like it here very much.

Sunday, 3 p. m.—An analysis today shows more casts, fibrin, gelatin, and some zinc and copper. The chemist also discovers that in 1853 I fell from an apple tree and tore my panties in two places.

Monday, 4 p. m.—Temperature two-fifths of one degree above normal. Pulse regular, but sluggish. Have got all my business arranged, even to terms for shipment home.

Another chemical and microscopical analysis made yesterday of sputum, showing traces of nicotine and other poisons. Adieu, kind friends, I'm going home. A sweet young novice, who is training for a nurse, took my pulse this a. m. Took quite a while to find it, but I did not murmur or repine. I am trying to learn to love everybody, for to that bourne to which my chemist says I am going I should carry with me no enmities, no animosities.

The life here at the hospital is delightful, and while I am fading away it is a joy to have loving hands bathing my little footies and manicuring my knobby brow. . . .

Good-bye, wicked world! After December you will have to pay your own taxes, so the chemist says, for traces of one lung, also floating island and ice cream, were found in this last analysis. Do not mourn for me, kind friends, and choke and sob and make yourselves sick. It will be vain. Just live as I have done, so that you may come where I am at. Live upright lives and run the lawn mower about every ten days over my humble grave during the summer. That is all you can do. Weep not. In me you have lost a man who can never be replaced, but never mind—the world will have to drag on somehow. I couldn't be here all the time. Anybody with a particle of sense must have seen that I couldn't live forever.

P. S.—While penning the above words a messenger boy has come swiftly in with a note from the chemist. He says in his note: "We regret that an error was made in your case by our assistant, who, in the rush of business here at the college, has got your analysis somewhat confused with that of the justly celebrated horse, Nancy Hanks. We unfortunately got the sputa mixed. On going over your case again we find that, whereas, there are signs of glanders in the Hanks' analysis, you are, as a matter of fact, almost too healthy."

So today I leave my kind little nurses in their neat attire. Good-bye, girls, I'm going home where they know me. No one there will count my fevered pulse in the still watches of the night. No one there will put a nice hot-water bag, that feels like a Mexican hairless dog, at my feet.

Seriously, what a blessing it is, when we are weary of work and the gastric functions go on a sympathetic strike and the solar plexus goes away and sits down on a stone pile to weep over the

situation, that one can go to one of these cosy corners, out of the current of whoop and hurrah, and eat raw steak and be sort of made much of.—*Ex.*

Sanitary Rules to Govern Barber Shops.—The Health Board of San Francisco, Cal., recently sent the following rules to the supervisors to be adopted as an ordinance, and they will also be submitted to the State Barber Examiners for approval:

Mugs and shaving brushes shall be sterilized by immersion in boiling water after every separate use thereof.

Razors shall be wiped with alcohol both before and after they have been used.

Hair brushes known as "sanitary brushes" must be used after first being sterilized.

Razors strops must be kept clean and never wiped off with the hand or blown upon with the breath.

A separate clean towel shall be used for each person.

Barbers shall not blow away with breath any hairs after cutting, but use a towel or bulb or hairbrush.

Barbers shall keep their finger-nails short-cut and clean; alum or other material used to stop the flow of blood shall be used only in powder form and applied on a towel.

The use of powder-puffs, finger-bowls and sponges is prohibited.

No person shall be allowed to use any barber shop as a dormitory.

All barbers' instruments must be disinfected after using.

These rules shall be placed in a conspicuous place in the shops.—*American Medicine*, Aug. 31, 1901.

American Medicine states that each physician in the United States has 655 persons to look to for his support, according to the latest governmental statistics. California stands at the bottom, or top, depending on the view, of the list, for there are only 416 actual and prospective patients for each physician, while in Alaska 2,349 persons have to depend on one doctor. New York is near the average with 603 persons for each physician. Pennsylvania has 662 and New Jersey has 856.—*Cal. Med. Jour.*

The Physical Basis of Smell.—The phenomena of light, heat, and sound have all been correlated under theories which work thoroughly well, but their sister phenomenon, smell, is an almost untouched field. Of course, smell must have a physical basis; but what that basis is, is as little understood as that of light two

hundred years ago. The phenomena of light became first correlated into some sort of coherency by Sir Isaac Newton under the "corpuscular theory," which, after a bitter struggle, gave way to the powerful "wave theory," that today stands seemingly impregnable. Smell, however, is still in the "corpuscular stage." It is generally believed that the odor of musk, for example, is due to emanations of fine particles which proceed from the substance to the sensory surface in the nostrils; the fact that upon giving off these emanations for years, the musk does not lose weight, offering apparently no insuperable objection to the hypothesis. The subject has recently been investigated to a small extent by Messrs. Vaschide and Van Mele, of France, who attempt to show that, like light, smell is due to ether vibrations of short wave-length. Some of the evidence adduced so far goes to show that non-volatile substances do not lose weight or volume; that certain odors are neutralized like heat and cold by mixing; that fatigue may take place for a single odor, while the sense continues to distinguish others; and, finally, that an odor may be perceived when the nostrils are filled with an odoriferous solution. In spite of such evidence, if the radiant matter in a Crookes tube may be dissociated into particles much finer than the chemical atom, as appears, and if the radiation from uranium compounds is to receive a similar interpretation, it is quite possible that, after all, the physics of smell may still have a "corpuscular" basis.—*Dental Brief*, October, 1901.

The efficacy of mechanical appliances requires study and practical experience. The name of FLAVEL upon goods is proof that the article is designed especially for its objective treatment. Thousands of physicians testify to the merits and reliable construction of the Elastic Stockings, Abdominal Supporters, Trusses, etc., made by C. W. Flavell & Bro., 1005 Spring Garden St., Philadelphia, Pa.

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Ecthol exerts a decided influence on eczema, and can be used to advantage in several different conditions. In cases of moist and inflamed lesions with great soreness and irritation it may be given in teaspoonful doses; and the more markedly the eruption is purulent the more decided the effect. It may also be used with manifest advantage when the patches are greatly infiltrated and the inflammation is sub-acute in character.—*American Journal of Dermatology and Genito Urinary Diseases*.

Laxation in Constipation, by J. A. Rene, M. D., West Superior, Wis. The successful treatment of constipation does not consist in simply momentarily relieving the overloaded intestinal organs, because some of the pathological conditions co-existing may persist even after this result has been obtained.

The fact that there is an intimate association between the intestinal and cerebral functions was early recognized by the ancients—a fact that shows the need of attending to the cerebral disturbances while correcting the pathological conditions of the gastro-intestinal tract.

The habitual use of purgatives is not to be encouraged, as it only increases the disability which they are intended to remove and therefore it is essential that the treatment should be one aiming at permanent results as well as relief. And for that reason it is very often necessary to combine other drugs that will not only relieve the constipation, but also cure the other pathological conditions which might have been the primary cause of the constipation, or have been brought about by the constipation itself.

Of late years many preparations have been placed at the disposition of physicians, and some of these preparations are certainly scientific combinations. Most of them contain such splendid remedies as belladonna, aloes, cascarn, etc., but of all the recent preparations which have come to my notice I have found the Laxative Antikamnia and Quinine Tablets to be the most efficacious in relieving cerebral disturbance, as well as curing the intestinal trouble.

A close study of this combination shows that it is a tonic-laxative, analgesic and antipyretic—and its administration in certain cases is sure to be followed with excellent results. For instance, in the sequelæ of typho-malarial cachexia, when a gentle and safe laxative combined with an anti-periodic is required, I have found this preparation of the utmost value. The co-operative or synergetic properties of these ingredients will readily commend themselves to the profession.—*Chicago Medical Times*.

Physicians having patients not caring for the turmoil of hospital life, and who would appreciate the comforts of a private home in addition to hospital necessities and accommodations, may have them cared for by a graduate nurse in her own home. Ten years' experience in hospital and private nursing. Chronic cases accepted. Fine location. Best of references from first physicians. Telephone nurse at East 1184 W., or, address Trained Nurse, care of Cleveland Medical Gazette, 720 Rose Bldg.

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Substitute For Coal.—Dr. Henry W. Morrow, Wilmington, Delaware, has invented an artificial fuel. It is made of earth combined with coal tar, moulded into bricks. Any kind of earth—not sand—will do. Cost estimated at \$2.50 per ton. It will burn four or five hours, throws out no gas, with a bright, blue flame and intense heat. Saw dust is added, which burns out

speedily, leaving the brick porous and admits the heat. This is not essential. Coal slack may also be used. The bricks contain three per cent. of coal tar, ninety per cent. of earth, and may lie in the air like coal without injury. Coal tar is added to prevent damage from exposure. This fuel burns up completely, leaving no clinkers—all falling into fine dust. It does not injure, in the least, the tubes of boilers or crown sheets.—*Public Ledger*.

Two of the Noble Institute's scientific prizes, each worth 20,000 Danish kroner (\$5,360), have been awarded, one to Dr. Finsen, the originator of light treatment for lupus, and the other to Dr. Pavloff, the Russian physiologist, for his researches in nutrition.—*Med. Times*, October, 1901.

M. Lubinski (*Deut. med. Woch.*, Sept. 19, 1901), describes two cases of this unusual affection. One patient was a boy of twelve and the other a middle-aged woman. In the one case, no cause for the trouble could be found, while in the other it was ascribed to the large number of carious teeth in the patient's upper jaw. In both, the symptoms consisted in swelling and tenderness of the entire organ, with the development of an acutely sensitive tumor of the septum. In each instance relief was afforded by ample incision and drainage with curettage, though the septum was left sufficiently damaged to produce marked flattening of the member with sinking in of its dorsum.—*Med. News*, Oct. 12, 1901.

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THE Cleveland Medical Gazette

DECEMBER, 1901.

Original Articles.

A CASE OF STRICTURE OF THE URETHRA IN A FEMALE, COMPLICATED WITH ENURESIS, DILATATION OF THE BLADDER, URETERS, AND KIDNEYS.

BY

L. B. TUCKERMAN, M. D., CLEVELAND.

L. V., a girl of 5, somewhat small of her age, came under observation Feb. 28, '99. She was the only one living of three children, one dying at three days old, and the other of bowel trouble at seven months. Patient always had had bowel trouble, bowels either constipated or loose, and had been given "Castoria" a good deal of the time since babyhood as a matter of routine when bowels were constipated. She suffered a good deal from colic. As a baby her diapers were always wet and when two years old she had to be taken up 5 or 6 times a night but did not then wet the bed. Since 4 years of age, however, she has wet the bed constantly at night and her clothes during the day as well. She had been given all sorts of medication without benefit. Local examination showed a fissure running from the anterior border of the anus to the fourchette, meatus urinarius apparently of normal size, and an incarcerated clitoris. The preputial adhesions were broken up and the glans clitoris freed. Under medication and local treatment of the fissure there was apparent improvement. April 12th, she was suddenly taken with pain in the loins, severe dysuria and the passage of blood in the urine, the pain chiefly on the right side shooting downward toward the bladder being strongly suggestive of renal calculus. The bladder was distended reaching up to the navel. A No. 10 fr. catheter was passed drawing nearly a pint of bloody

urine. At the proximal end of the urethra there was considerable resistance to the passage of the catheter. The urethra was dilated up to 18 fr. the chief resistance remaining as at the first attempt at catheterization, at the neck of the bladder. The blood disappeared in three or four days, but there remained a considerable urinary sediment, not ropy, consisting of pus cells, and containing a streptobacillus and cocci, only one of which, a staphylococcus, proving susceptible of cultivation. When the power of voluntary micturation returned it was noticed for the first time that the bladder never fully emptied itself on micturition, between 4 and 6 fluid ounces always remaining as residual urine. Under the use of urotropin and alkaline diuretics the urine cleared up to a great extent, but never wholly. It remained light in color and of a pearly look when first passed. In hopes that the removal of resistance at the vesical neck would enable the bladder to empty itself completely the urethra was dilated to 24 fr. and the bladder was emptied by catheter every 3 or 4 days. The patient improved greatly, keeping herself dry during the day and wetting the bed but rarely, though she had to be taken up one or two times to urinate, but the residual urine never fell below 2 1-2 fluid ounces and if she were allowed to go a week without catheterization the volume would at once increase to 4 fluid ounces or even more. Apr. 17, '00, when she came to the office she was complaining of pain in back and loins and was somewhat feverish. The urine was more cloudy than usual. The next day and the day after she also came to the office but on the 20th she was much worse and I saw her at her home, and drew her water which seemed to relieve her very much. She died suddenly that evening.

At post mortem the bladder was found dilated and with greatly thickened walls and a small cavity containing pus within the bladder wall at the fundus. Both ureters were dilated irregularly throughout their whole extent and likewise the pelvis of each kidney, the cavity encroaching on the substance of the kidney itself. The whole urinary tract contained pus. There was also an anomalous formation of the ascending mesocolon. It was continuous with the mesentery and allowed as free movement of the ascending colon as of the small intestine itself. This condition doubtless explained in part the colic and constipation alternating with diarrhoea from which the child suffered. I have seen this anomaly in the mesentery in one other case, that of a child of about four years who had suffered from colic and recurrent obstruction since birth and who finally died of volvulus of the whole small intestine and

ascending colon, the mesentery being like a pedicle and so long and free that it had become twisted twice upon itself producing complete obstruction of the bowels and strangulation of the whole small intestine by obstruction of the mesenteric veins. Cultures were made from the pus in the kidneys. There was found a bacillus which gave the reactions of bacillus coli communis.

The child naturally dreaded being catheterized and kicked and struggled vigorously whenever it was done. Her mother would upbraid her for not lying still, telling her that it wouldn't hurt her if she would only be good and not kick and struggle. One day her mother found her with her doll on the table in the lithotomy position with a straw for a catheter. "Lie still you naughty girl," she was saying, "and stop your crying. It won't hurt you if you just lie still. Now behave yourself and be a good girl."

A FEW REMARKS ON THE ROUTINE EXAMINATION OF GONORRHOEICS.

BY

FRANK OAKLEY, M. D., C. M., PH. G., CLEVELAND.

During the past few months the attention of the profession has been directed to a series of articles written by some of the most prominent genito-urinary specialists, not only in America, but also in Europe. These articles have been in answer to the question, "Is Gonorrhoea Curable?" The consensus of opinion seems to be that a large percentage of cases is curable and that some few are incurable. It is not the purpose of the writer to discuss the curability of gonorrhoea, although he believes that nearly all cases of acute gonorrhoea may be cured to stay cured, and that many cases of chronic gonorrhoea and stricture may be cured if properly and persistently treated. The question is, *Why* should there be any doubt as to the curability of this disease which is regarded by the public, and unfortunately by many members of the profession as a simple disease—little worse than a cold? The answer may be found in the fact that the average physician is careless, does not take time to look into the real condition, because he does not appreciate the gravity of the disease or does not wish to be troubled with a dirty case of *clap*. The treatment given the majority of cases amounts to little more than a placebo. This is unfortunately true even in hospital clinics. Is it any wonder then

that gonorrhoea is so *difficult* to cure, is looked upon as incurable, or that the advertising quack reaps such a rich harvest from these unfortunate cases?

In the first place, is it not necessary to give the same attention to cases of gonorrhoea that we would give to a disease as serious in any other part of the body? Is it not just as important to make a correct diagnosis, in order that we may apply the best and latest treatment to the condition, not merely ask a question or two, and write a prescription for balsam copabia or santal, with an astringent injection telling the patient to report in a week's time? We may give astringent injections and balsamics until the patient is gray-headed, and we will not cure a case of chronic prostatitis or residual gonorrhoea where the urethral glands are the seat of the gonorrhoeal inflammatory process. The fact is we will only keep our patient hanging on until he becomes disgusted, and leaves us, to fall into the hands of unscrupulous quacks or does nothing for his condition, is let loose upon society to infect possibly, in fact probably, his own wife with the terrible train of consequences known to the gynecologists.

Let us then take some care with the unfortunate, and make a systematic examination in every case. Begin by taking a complete history of the case, of previous attacks, if any; this attack may be a recurrent gonorrhoea. It will also give a hint as to the manner in which the patient has been treated previously.

First, examine carefully the stains on garments. Valentine has tabulated the gross clinical differences.

Stains from Urethra.	Stains from Drops of Urine Dribblings.	Seminal Stains.
Circular or ovoid.	Irregularly shaped.	Band-like or shred shaped.
Small with sharply defined edges.	Large, with undefined edges.	Elevated edges.
Color same throughout.	Center darker than periphery.	Varying thickness, gives deeper color; in spots.

Diday gives the following changes in color:

A colorless discharge produces a starch-like stain.

An opaline discharge produces a grayish stain.

A white discharge produces a yellow stain.

A yellow discharge produces a green stain.

A green discharge produces a reddish-brown stain.

A red discharge produces a mottled dark brown stain.

The matter of stains on garments is important because it produces a great deal of uneasiness and distress of mind in many nervous patients. No amount of talking will reassure him that his condition is not serious.

No matter from what source the stain arises it is absolutely necessary to make a microscopic examination in order to definitely decide where it comes from. This is a comparatively simple matter and should not be neglected not only for our own satisfaction, but also because we may be able to relieve the mind of our patient by assuring him that the discharge or stain contains only some healthy spermatozoa and does not contain any gonococci.

Inguinal Glands and Abdomen.—It is well to look for any red spots or rash on the abdomen. It would be awkward to have to tell the patient some weeks later that he had a mixed infection and that we had overlooked syphilis. The importance of noting the inguinal glands is this: that should we find them enlarged and tender and we so inform the patient, he will have no reason to tell us in a few days that the treatment causes swelling and pain.

Testicles.—Take the testicles one in each hand, balance the poles upon the third finger leaving the thumb in front; in this manner we may gently palpate the testicle epididymus and spermatic cord. We may find a tender epididymus or tender testicle, a thickened cord, a detached epididymus—something that will tell us to be on our guard for trouble and prepare for it, also to protect ourselves against the accusation that our treatment has caused the epididymitis or swelled testicle.

Prepuce.—A careful examination of the prepuce is next in order. Should it be long and tight a soft sore may be found along the line of the corona. A severe balanitis may be mistaken for gonorrhoea where there is difficulty in retracting the foreskin. If the orifice of the prepuce is sufficiently large to expose the meatus the parts should be wiped clean; pressure is then made along the under surface of the urethra. If gonorrhoea be present pus will exude from the meatus. There may be present, however, both gonorrhoea and balanitis. A small plug of cotton may be carefully inserted into the meatus and pressure made upon the prepuce from behind forward.

Herpes progenitalis may be mistaken for balanitis, especially when complicating gonorrhoea and accompanied by much hyperaemia. Phymosis, if present, must be relieved by active and continuous treatment.

Meatus.—The meatus should be carefully examined for any congenital mal-formations, or abnormal positions, etc., also for constrictions or stricture of the internal or external meatus. This may interfere with free drainage and should be attended to as soon as advisable.

Discharge from Meatus.—The amount of discharge on the cotton should be noted, also its color. This applies especially in acute cases. The length of time since the cotton was changed and the amount of secretion on the cotton will give a fairly good estimate of the amount in twenty-four hours. We must remember, however, that there is always more discharge during the day. In chronic cases, morning drop, or gleet, we may find only a moisture, slight scale, or concretion at the meatus.

A cover glass specimen should be taken, stained, and examined at once in order to ascertain the number of gonococci present. This examination should be made every day, at first, at least, as it will keep us informed as to the progress of the case. Should there be only a slight moisture, a sterile platinum wire inserted into the meatus will procure us the desired specimen. It may be necessary to strip the urethra in order to secure the drop. This is best done by holding the penis in the left hand, the thumb and forefinger anteriorly and above. Gentle traction is then made upon the organ, the forefinger of the right hand is swept from behind forward, along the entire length of the urethra and the drop expressed.

Urine.—Macroscopic Examination.—The examination of the urine is of the greatest importance in arriving at a diagnosis. It also keeps us informed as to the progress of the disease.

First, a note should be made of the length of time the urine has been retained. Should the posterior urethra be very much inflamed and swollen the slightest quantity of urine coming in contact with the membrane provokes desire to urinate—the chief cause of imperious urination.

Where the acute disturbances do not prevent it and where there is reason to suspect posterior urethritis or prostatitis, examination of the urine is the only method of reaching a diagnosis. The first urine passed upon arising is the best for this purpose, but it is almost impossible to obtain it. The urine brought to the office in a bottle is almost worthless for macroscopic examination. It would be better to have the patient come after he had retained his urine for two to four hours. Have him pass his urine into two glasses, the first portion about five oz., the remaining urine into

the second glass. Not the total amount. The first portion washes the anterior urethra fairly clean, will also carry some discharge from the posterior urethra. Should, however, there be a severe posterior urethritis, the second glass will be more turbid than the first. There are two exceptions to this—cystitis and pyelitis, then both glasses will be equally turbid. In diseased prostate or seminal vesicles the contents of these organs are expressed into the posterior urethra by the contraction of the muscles at the termination of urination. Again, where the discharge may be scanty, it may be entirely washed out by the first stream. The anterior urethra should then be carefully washed out with a warm 4 per cent. solution of boracic acid; the discharge from the posterior urethra will be found in the first portion. Another method is to wash out the anterior urethra with a methylene blue solution. Any filaments appearing in the urine stained blue would be from the anterior urethra while the clear shreds would be from the posterior urethra.

Pathological Floaters.—Valentine has classified them as follows:

Shreds, coarse, large, long, medium, small.

Shreds, fine, large, long, medium, small.

Filaments, coarse, large, long, medium, small.

Filaments, fine, large, long, medium, small.

Flakes, coarse and fine.

Comma filaments supposed to be from prostate gland.

Purulent Floaters.—Easily broken and sink rapidly to the bottom of the glass.

Muco-Purulent Floaters.—Grayish looking spots, held together by transparent substances and float about the middle of the glass.

Mucous Floaters.—Appear like the muco-purulent, only float at the top and more transparent.

Guyon has tabulated the distinguishing features:

Purulent Filaments.	Muco-Purulent Filaments.	Mucous Filaments.
Short.	Very much larger.	Transparent.
Multiple.	Less numerous.	
Opaque yellowish.	Not homogeneous.	No opaque spots.
Sink rapidly.	Sink slowly, remain about middle of glass.	Light, remaining at upper part of glass
Easily removed from urine.	Difficult to remove from Urine.	Very difficult to remove from urine.
Easily spread out on cover glass.	Roll up into a hard ball not easily spread out.	Roll into clear thick mass; dries slowly.

Microscopic Examination of the Urine.—The first urine passed in the morning should be collected and saved, about 6 or 8 oz. if possible. Allow this to stand for six hours to sediment. It is not wise to use a centrifugal machine, because it breaks the fine filaments, spoils casts and epithelia. Sedimentation by gravity is much more satisfactory. Of course, where haste is necessary the machine may be used.

Professor Louis Heitzmann, of New York, has worked out the differential diagnosis of the various pathological conditions of the genito-urinary tract, until he can diagnose these changes with almost mathematical certainty. The writer begs to refer to Dr. Heitzmann's valuable book on this extremely interesting subject.

Features found in urine after Heitzmann:

Prostatitis.—Acute.—Red blood corpuscles. Pus corpuscles. Mucus. Epithelia from prostate gland.

Red blood corpuscles are never absent. The diagnostic point is the presence of cuboidal epithelia from the prostate columnar epithelia from the duct of prostate. An acute prostatitis is almost invariably associated with inflammation of urethra and bladder, especially the trigone, therefore, epithelia from the urethra and upper and middle layers of the bladder will also be present.

Acute Suppurative Prostatitis.—“Abscess of Prostate.”—Red blood corpuscles; very large numbers of pus corpuscles, epithelia from prostate gland; duct of prostate, urethra; middle layers of bladder; connective tissue shreds and mucus.

Chronic Prostatitis.—Pus corpuscles, containing fat globules. Epithelia from prostate gland containing fat. Epithelia from duct of prostate. Epithelia from middle layers of bladder, mucous shreds, free fat.

Hyperthrophy of Prostate.—Age of patient plays an important part. Should we have a patient 45 to 60 years of age, with the features of chronic prostatitis, plus small connective tissue shreds, endogeneous new formations in epithelia from the middle layers of the bladder (denoting pressure) you may be sure that we have enlargement of prostate gland.

Spermatorrhoea.—The features of prostatitis with the addition of spermatozoa and epithelia from the ejaculatory ducts, mucus in large amount, mucus casts. These latter must not be mistaken for hyaline casts from the kidney—a little careful focusing is all that is required.

Seminal Vesiculitis or Spermato-Cystitis.—Pus corpuscles, red blood corpuscles, spermatozoa, with enlarged heads, epithelia from prostate gland and duct, ejaculatory duct, mucus casts and free fat globules.

Stricture of Urethra.—Red blood corpuscles, pus corpuscles, epithelia from urethra, large quantities of connective tissue, shreds, mucus, fat in epithelia.

Examination and Exploration of Urethra.—No examination or exploration of the urethra should be attempted while there is any acute inflammatory process going on in that canal. In cases of gleet or chronic discharge one cannot arrive at a satisfactory diagnosis until the urethra has been thoroughly examined.

The patient is placed upon his back on a suitable table or chair, a clean towel placed under the exposed genitals. The penis glands and prepuce washed with a bichloride solution 1-6000, the size of the meatus noted and a bougie-a-boule selected, one that will enter the meatus easily. The instrument should be lubricated with a suitable lubricant, readily soluble and non-irritating. Glycerine sterilized is about the best, but even glycerine irritates some patients. The bougie is slowly and gently passed into the canal. By careful manipulation we are able to detect the tender spots and locate them. Should you come upon an obstruction it is not well to force the instrument, but better to withdraw and select one of smaller size; of course the obstruction may be due to spasm, in which case do not force the bougie through, but hold the point firmly but gently against the face of the obstruction for a few minutes. If it be a spasm it will relax and allow the instrument to pass. If it be a stricture select a smaller instrument and explore still further. You may meet more than one obstruction. Pass the instrument the entire length of the urethra. This operation should be performed without causing pain to the patient and

without hemorrhage. In hyperaemic conditions a drop or two of blood may follow even the gentlest manipulation.

Professor Valentine declares that no anaesthetic except gentleness is admissible in genito-urinary work. That one's honor is not at stake to pass any certain sized sound or bougie, but our honor is at stake not to injure or cause our patient needless pain. The use of cocain is bad practice because while it deadens sensation we cannot tell what we are doing so well and after-effect is to cause hyperaemia. Undue haste and roughness will certainly defeat the end in view. If at first you do not succeed, double your *gentleness*.

Now that the bougie is in the bladder or in the posterior urethra, begin to withdraw it by a succession of quick jerks, not roughly, but gently. Should there be strictures present a peculiar sensation is transmitted to the fingers. The sensation is as if the instrument passed over a tight cord or string; the intensity of the vibration, its length in time, tells us the quality of the stricture, whether it be *soft, hard, long* or *short*. The entire urethra should be explored in this manner. The size of the instrument will tell us the calibre of the smallest stricture and give us a key to the size of the sound, or bougie to begin treatment to dilate the strictures.

Urethroscopic Examination.—The urethroscopic examination is too big a subject to be more than touched on in an article with the scope of this. The writer begs to refer to any of the many books written on this interesting subject. It is sufficient to say that where possible the urethra should be explored and carefully examined by the urethroscope in all cases where there is any difficulty in effecting a cure by the ordinary treatment. In many cases the gonorrhoeal discharge depends upon a simple spot of inflammation and may be limited to that spot; superficial erosions and ulcerations may be seen. The hyperaemic condition, easily bleeding, papilloma, polypoid growths, small like millet seed, or of considerable size; the orifices of Little's glands or the crypts of Morgagni may be apparent,—gaping open and surrounded by a red swollen wall; it may be possible to see in some cases a purulent secretion oozing from their mouths.

Examination of Prostate and Seminal Vesicles.—The patient is placed in the recumbent position, the penis washed with 1 to 6000 bichloride, a clean towel placed under the buttocks. The head should be low and the shoulders resting upon the table; the feet are placed so that the heel of the right foot rests upon the

instep of the left; the knees are then flexed, and a towel placed over the trousers to protect them. There has been some discussion as to the best position in which to place the patient in examination of the prostate. Many surgeons prefer to have him kneel upon a chair resting upon its back, others the Simms' position. The dorsal position is preferable because the prostate and bladder fall back in the pelvis by gravity, because the examining finger has not so far to reach. When pressure is made upon the abdomen, pressing down the organs, the surgeon has the prostate almost between his fingers, where it can be distinctly marked out. Because it is more convenient for the surgeon and less embarrassing for the patient, because the operation is apt to cause syncope in some patients, and it is well to have him in a prone position should this occur. It will be noticed that dilatation of the rectum will cause dilatation of the pupils and many patients feel sick and faint for a few minutes after the operation. It is well to have him remain quiet for five minutes.

After the patient is in position the examining finger is coated with some suitable substance. Flexible collodion answers the purpose as well as anything; a solution of rubber in chloroform and ether is an excellent coating. Allow the coating to dry thoroughly, otherwise it will cause the patient considerable discomfort and smarting. Many surgeons use a rubber finger cot, but the sense of touch is not so acute as with the simple covering. The finger is then lubricated with some soluble non-irritating lubricant. Soap is irritating and sometimes causes discomfort. Vaseline is dirty and greasy, soils the clothing.

The scrotum is taken in the left hand, and drawn up out of the way. The lubricated forefinger of the right hand is pressed upon the anus and into the rectum without any twisting movement. The thumb is passed up alongside the scrotum, the other fingers doubled up are pressed against the perineum. The forefinger directed upward and forward, the elbow lowered almost to the table. The scrotum is released and gentle pressure made with the left hand upon the abdomen just above the pubes; with this technique the shortest forefinger may reach the prostate gland and seminal vesicles.

You will note the temperature of the rectum. A hot rectum and tender prostate indicate that there is some active process going on and it would be well to use the greatest gentleness, in fact, the pressure of the finger will be almost unbearable to the patient. The lobes of the prostate should be marked out and sulcus between

the lobes defined, enlarged lobes noted; one or both may be diseased. The soft, flabby, hard, indurated condition noted, and tender spots located. Pushing the finger still further upwards past the prostate the seminal vesicles are to be felt for. In healthy condition they cannot be located. Above the prostate and somewhat external to it the vesicles project along the bladder. In disease they present a somewhat sausage-shaped roll—soft or hard, sometimes distinctly knotty. Care must be taken not to mistake the artery to the prostate for the vesicle.

It may be desirable to procure a specimen of prostatic juice for microscopical examination. Stroke gently the prostate with the finger, and reaching high the vesicles are stripped. No great amount of force is necessary; after stripping each lobe with ten or twelve strokes, the thumb of the examining hand is pressed along the urethra from behind forward and carried along the urethra as the finger is withdrawn from the rectum, the juice will be expressed from the meatus. Do not be surprised should you fail to procure more than a drop, because the discharge may have rolled into the bladder. You will find upon examining the juice the same features as stated under examination of the urine, only more condensed and numerous. In seminal vesiculitis, spermatozoa with enlarged heads, resembling pus corpuscles with tails will be seen.

It is good practice to wash out the urethra as soon as convenient after examination, massage or stripping the prostate, because we may have gonorrhoeal pus in the ducts and gland substance and should we leave it in the urethra an acute attack of gonorrhoea may result. After an examination or massage of the prostate many patients have difficulty in urinating. It is also difficult to wash out the posterior urethra on account of spasm. It would be wise therefore, in those cases to wash out the bladder before beginning the operation with a 4 per cent. solution of boracic acid and leave 4 to 6 oz. of the solution in the bladder. This sometimes facilitates the examination. When the patient urinates this will wash the urethra clean.

It should be an invariable rule to wash the penis before any instrumentation. If this precaution is taken and the urethra washed out after instrumentation, we will do away with cartheter fever, chills, etc. Only soluble lubricants should be used; no grease, no soap.

It has not been the desire of the writer to go into the minute differential diagnosis or treatment of genito-urinary disease

(gonorrhoea) its complications and sequelae, only to point out the necessity of making a systematic examination, in order that we may gain some knowledge of the exact condition, not merely ask a question or two, and give a prescription, without having the slightest idea what it is going to do, or in fact, what it is expected to do. If this paper serves no other purpose than to set some of the careless ones thinking; to realize that gonorrhoea is a very serious disease,—anything but a joke; in fact, a disease, viewed by its results, one of the most far-reaching the physician has to deal with; the most prevalent disease with the exception of measles,—then this feeble effort will not be in vain.

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SOME OBSERVATIONS ON INTUBATIONS OF THE LARYNX.

BY

WILLIAM E. LOWER, M. D., CLEVELAND, O.

To understand most clearly the present status of laryngeal intubation it is necessary to divide it into three periods; 1st, before the introduction of antitoxin; 2nd, since the use of antitoxin; 3d, intubation at the very beginning of laryngeal obstruction. Every one who did intubation for obstruction of the larynx caused by diphtheric membranes before the days of antitoxin must recall the very high mortality rate. In fact, the death rate was so high that many who intubated at this period abandoned it, believing that as many cases recovered without the tube as with it. This however was not the writer's experience, for a goodly number did get well and only by the introduction of the tube, but the mortality was so high that it was far from encouraging.

The causes of death in this period were the effects of the toxins, unchecked by any known remedy, and by septic pneumonia from prolonged use of the tube. With the advent of antitoxines conditions changed. The toxins had a checkmate and the membranes no longer formed but rapidly vanished. This shut off one great source of death; and the lessening of the time of wearing the tube, in a great measure, the other source which, as previously stated, was pneumonia. The mortality rate for intubation in the second period when the antitoxin is given at the very beginning of the disease is only about one per cent. and for all cases, at all stages, only about five or six per cent.

The deaths following intubation at this time could almost always be attributed to septic pneumonia from too prolonged wearing of the tube, often unnecessary, or from the very late introduction of the tube when the patient was almost moribund and had no resistance and septic material and mucus were readily inspired. To this the writer has called attention in a previous paper on "Early Intubation."

The third period, intubation at the very beginning of laryngeal obstruction, is the ideal time and the same reasons given in a previous paper are for the sake of emphasis, repeated here:

First, the child is stronger, has greater resistance, and can bear the operation better. Second, the time of wearing the tube is lessened, generally not requiring over 24 to 48 hours. Third, by shortening the time of wearing the tube there is less opportunity for the introduction of septic material into the trachea, and consequently less chance of septic or broncho-pneumonia which is nearly always fatal.

The technique of the operation must not be underestimated, for unnecessary manipulation and prolonged efforts at introduction, and the crude, rough methods so often employed are not devoid of danger, and sudden deaths have occurred during the introduction that could be attributed directly to the operation. The deaths occurring at this time are not due, as is generally supposed, to suffocation by pushing down of membrane but to a reflex inhibition of the heart through the irritation of the terminals of the superior laryngeal nerve. This has been clearly shown by Crile in his experimental work in surgical shock. If every operator were to disregard this and roughly manipulate this dangerous area it would certainly not be wise to recommend intubation except as a last resort. This reflex can be abolished by the giving of atropine a short time before the introduction of the tube or by the avoidance of any undue irritation of this area. It seldom becomes necessary to make more than one attempt at introducing the tube and no attempt should be prolonged, but the tube removed and a second attempt made. The tube should be thoroughly sterilized and the operator should be familiar with the best remedies in case of an emergency. The tube need not, as a rule, remain in over 48 hours and oftentimes less, depending entirely upon the amount of obstruction and upon the use of the antitoxin.

The writer is convinced that the very best results are obtained only by the foregoing methods and in conclusion most urgently recommends:

First, antitoxin in all cases and at the very commencement of the disease; second, early intubation, at the very beginning of the obstruction; third, the most careful technique.

This experience is based upon 198 intubations.

The Osborn.

Abstracts and Extracts.

ON A NEW GYNAECOLOGICAL POSITION.

By Dr. F. Jayle.—The gynæcological position recommended by the author (*Brit. Med. Jour.*), is a combination of the ordinary position of the speculum or lithotomy, and of the sacro-dorsal "decline" position. In order to obtain it, it is necessary to have a balancing table with a system of shoulder-rests. This position throws back the intestines, dilates the vagina, and stretches the anterior vaginal wall, the exploration of the tubes and ovaries being thereby greatly facilitated.—*N. Y. Med. Jour.*

* * *

THE HEART IN CAISSON WORKERS.

Dr. Hornung (*Munich Med. Woch.*), has examined a number of workers in a caisson after varying periods of exposure to the compressed air. A slowing of the pulse with dilatation of the left ventricle and an increased blood pressure were noted after a short exposure, but after prolonged labor in the caisson the reverse was uniformly found. In his own person, the author, who suffered from a perforation of the membrana tympani and a chronic otitis media, did not experience the slightest vertigo, which is usually described in caisson disease as due to increased pressure in the labyrinth.—*N. Y. Med. Jour.*

* * *

QUININE IN THE TREATMENT OF PUERPERAL FEVER.

There have been some indications lately of a disposition to return to the use of quinine in a number of conditions in which its employment had been superseded, and puerperal fever seems to be among those conditions. Aufrecht (*Therapeutische Monatshefte*, 1901, No. 5; *Centralblatt für Gynäkologie*, September 7th) advises that in every case of puerperal endometritis the uterine cavity be irrigated with a solution of carbolic acid, and then quinine administered subcutaneously. The irrigation is effected through a glass tube as large as the little finger, provided with

two small openings and deeply grooved longitudinally on the outside. The solution, of the strength of two and a half per cent., should be from 82 deg. to 86 deg. F. in temperature, to prevent collapse. The injections of quinine are generally to be given once a day for three consecutive days. One part of quinine hydrochloride is dissolved in thirty-four parts of warm water, and a portion of the solution containing seven grains and a half of quinine is injected into the side of the abdominal wall.—*N. Y. Med. Jour.*

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MORVAN'S DISEASE (?) OR LEPROSY.

By D. Douglas-Crawford, M. B.—The Author (*The Lancet*), reports the case of a man, aged twenty-seven years, suffering from whitlows on the fingers and recurring hydrarthrosis of the shoulder joint. The reflexes were exaggerated, but there was no scoliosis. The case is interesting as bearing on the view put forth by Zambaco that Morvan's disease is nothing but leprosy modified by climate, hygiene, and environment; in short, an attenuated form. The shoulder-joint required aspirating about once a year; otherwise the disease seemed to have come to a standstill.—*N. Y. Med. Jour.*

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INFLUENCE OF CERTAIN FOODS ON THE GASTRIC JUICE.

Potapow-Pracaitis in Schiff's (*Revue de Therapeutique*, Paris, August 15 and September 1) experiments on dogs, he found that a marked peptogenic power was possessed by dextrin, bouillon, raw meat, bread, cheese, peptones, gelatin and black coffee. Pawlow found that Liebig's extract, bouillon, water, milk, gelatin and raw meat possess the property of increasing the secretion of gastric juice. In the research described in the present article, it was established that the results obtained by Schiff and Pawlow supplement and confirm each other. Certain substances, such as bouillon and raw meat, are both peptogenic and gastric juice-producing, or succagogue. The influence on the secretion of gastric juice is completely abolished when the substances are administered by the rectum, showing that the direct intervention of the nervous system is required for this sympathetic reflex secretion. On the other hand, the peptogenic effect is fully as marked when the substance is absorbed by the rectum as when absorbed by the stomach. The peptogenic effect is, therefore, transmitted by the intermeditation of the blood.—*A. M. A.*

SHOCK IN ABDOMINAL OPERATIONS.

By G. A. Hawkins-Ambler, F. R. C. S.—The author (*Brit. Med. Jour.*), calls attention to the fact that inspissation or drying up of the blood is a constant occurrence in shock. The specific gravity of the blood rises from 1,054 to 1,062, and this apoplasia may last for days. It is the cause of the thirst which is the first complaint of the patient when the peritoneal cavity is opened. It should be met by giving warm fluids by the mouth, and rectal saline injections. The prime element in the causation of operative shock is time; rapid operating is oftenest successful. The preservation of asepsis during an operation, the conservation of the patient's strength, the maintenance of bodily heat, stimulation with suitable drugs, rectal injections, and sufficient clothing, all tend to minimize exhaustion of nerve centres and breakdown of the vasomotor mechanism. Raising the foot of the bed is often of great service.—*N. Y. Med. Jour.*

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THE ACQUIREMENT OF NERVOUS HEALTH.

Dr. F. Savary Pearce, 1407 Locust street, Philadelphia, professor of nervous and mental diseases in the Medico-Chirurgical College of Philadelphia, Pa., read a systematic paper on this subject before the Mississippi Valley Medical Association during its session September 13, 1901, in which he especially dwelt upon the *pathogenesis of functional nervous diseases*. This pathogenesis, with the cardinal signs and symptoms of "nervous breakdown" in the earliest period of development is used as a basis for the only rational basis for prophylaxis. Many nervous and mental diseases have perverted function as a basis for development. The mental aspect must be fully recognized. Thus worry and overwork are both potent pathologic factors.

Signs of nervous breakdown are a general irritability of the motor and sensory neurons, coupled with lassitude, forgetfulness, and easy tire after the ordinary mental and physical activities of life.

Insistence is made for the urgent necessity of more serious recognition of these points by the profession if the wear and tear of modern exacting American life is to be forestalled in its baneful influence upon the acquired nervous temperament of many, and of business men in particular in the temperate zone of the United States.

Treatment consists in working "under" the usual pressure, of short vacations, of an ocean voyage, canoeing, horseback riding, overfeeding, change of scene, music, bowling, golfing, etc. Careful mental and somatic study of all cases must be made to exclude organic disease. Training of the will-power by carefully devised plans laid down by the physician (as chess-playing) is essential for ultimate success. Acquired nervous health can thus only be gained. Cases are cited and good results are given.—*Virg. Med. Semi-Monthly.*

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THE "OFFICIAL" REPORT OF THE CASE OF THE LATE PRESIDENT
M'KINLEY.

At last the "official" report, dated October 12th, signed by Dr. Rixey, Dr. Mann, Dr. Mynter, Dr. Park, Dr. Wasdin, Dr. McBurney, and Dr. Stockton, has been given to the medical press. In so far as it gives information not heretofore published, we may summarize as follows: Daylight was failing in the Emergency Hospital at the time of the operation; the rays of the descending sun penetrated the operating-room, but not the deep wound, and consequently Dr. Mann was embarrassed in the steps of the operation by defective illumination, which, however, was improved in the later procedures by the use of a hand-mirror. The wound of the anterior wall of the stomach was very slightly enlarged, in order to allow the operator's finger to be passed into the interior of the organ. It was found that the stomach was about half-full of liquid food. About four inches of the gastrocolic omentum were cut, and the cut ends were tied with strong black silk in two masses on each side.

After the gastric wounds had been closed with Czerny-Lembert sutures, the hand was introduced behind the stomach in search of the bullet, but this procedure seemed to have a bad influence on the patient's pulse, so further search for the missile was desisted from. The tissues lining the track of the ball were trimmed before the external abdominal wound was closed. A small aperture was left for purposes of drainage. Dr. Mynter had advised that a Mikulicz drain should be inserted behind the stomach, but all the others decided against it, and it was not done.

At the post-mortem examination it was found that the perforations of the stomach had been repaired ("closed effectually") and that there had been no leakage of pancreatic fluid. The pancreas had, indeed, not been primarily injured, but the report cites

experiments to show that slight injuries of that organ may rise to extensive areas of softening and necrosis. There was no evidence of peritonitis, and the whole abdominal cavity was found free from bacterial contamination. There were brown atrophy and fatty degeneration of the muscular substance of the heart of an extent amply sufficient to explain the failure of that organ to respond normally to stimulation.

Academically, it might be of interest to know what extent of stomach wall around the wounds was included in the Czerny-Lembert sutures, in order to get well outside the area of probable concussion thrombosis, but practically the question is of no importance now that we know that the wounds had healed. The report gives us no authoritative information as to the real cause of the fatal termination of the case, but it leads us to infer that a condition of lowered general vitality, chiefly occasioned by lack of sufficient exercise during the last ten years of his life, led to the President's death after all that surgery could accomplish had been done for him.—*N. Y. Med. Jour.*

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THE X RAYS IN THE TREATMENT OF LUPUS.

Mention has been made of the combined use of the light treatment and the X rays in lupus. The X rays alone have been used with success by Dr. J. H. Sequeira, of the London Hospital, in several cases of rodent ulcer. Stenbeck, of Stockholm, seems to have been the first who adopted this procedure. Dr. Margaret M. Sharpe has used the X rays with some success in lupus and in a case of exuberant growth of the end of the nose. Dr. Thurstan Holland has treated two cases of lupus in the same way with excellent results. Dr. A. Everett Smith, of Olean, N. Y., has reported a case of lupus vulgaris of fifteen years' standing which he cured by exposure to X rays. I have myself used the X rays in three cases of very advanced rodent ulcer with great excavation. The result in all was a complete cure. It is right to mention that in two of those cases I had the advantage of the technical skill of Dr. Low. I confess I expect a more brilliant future for this method than for the light treatment, though I am scarcely inclined to follow Dr. Schiff and Dr. Freund, of Vienna, according to whom the scope of this method embraces all dermatoses caused by parasites and all skin affections in which removal of hairs is an important step in treatment (favus, ring-worm, etc.). The X-ray treatment is, therefore, according to them, indicated in (a) lupus

vulgaris, mycosis of the skin, etc., (b) hypertrichosis, sycosis, favus, folliculitis, furunculosis, acne, etc., (c) lupus erythematosus.

Perhaps with regard both to the light-ray and the X-ray treatment we have only caught a glimpse of a new ocean of therapeutic enterprise, and our attitude should be that of

“ * * * stout Cortez when with eagle eyes
He stared at the Pacific—and all his men
Look’d at each other with a wild surmise—
Silent upon a peak in Darien.”

Extract from Lecture VI., The Lane Lectures on the Social Aspects of Dermatology, by Malcolm Morris, in *N. Y. Med. Jour.*

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DIETETIC TREATMENT OF PREGNANCY.

Prochownik says (*Thera. Monatshefte*), delivery can be almost certainly much facilitated in women with a small conjugata vera, not less than 8 cm. in diameter, by restricting the fluids to 500 c.c. a day, with 130 to 160 albumin, 80 to 130 fats and 100 carbohydrates, the total averaging 1800 to 2000 calories. Prochownik has now a record of 17 personal cases, and 31 collected in the literature, with a total of 62 births, all the children being alive at the date of publication. The previous births had been extremely difficult and tedious, and many of the children had died. On the above diet for the last ten or twelve weeks all the deliveries were much easier. With a conjugata of less than 8 cm. artificial premature delivery is the only resource and the precautionary diet is unnecessary. In women with normal pelves, but debilitated from any cause, congenital chlorosis, hemorrhages, etc., he commences dieting treatment early in the pregnancy, with repose in bed or reclining out of doors, for several weeks, better away from the home environment. The patients are encouraged to take as much albumin, fats, cream and fluids as possible, with frictions, gentle massage and small amounts of iron. To develop the lacteal secretion in women whose mothers and grandmothers had been unable to nurse their children, he orders a diet rich in carbohydrates, with massage of breasts, and reports 7 cases in detail, showing benefit in 2. He also tabulates 5 cases of obesity in which he forbade soups, sweets, etc., and ordered exercise, massage of the entire body, except the stomach, and restricted the fluids to 500 or 600 c.c., with 120 to 130 gm. bread and other food to

taste, but not in large amounts nor much at a time. He commences this dieting treatment of pregnant women with a tendency to obesity, as early as possible. He pleads for a more general study of this subject. The possibility of its efficacy is now demonstrated beyond question. It only remains to work out the details. He states that women in tropical climates, with their vegetable and fruit diet, usually bear children more easily than the women of the north, although the pelvis averages smaller in tropical races.

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LOCAL TREATMENT IN CHRONIC PROSTATITIS.

A. H. Leuf, Philadelphia, in *Med. Council*, states that for local treatment of the prostate, those preparations containing iodoform or iodol or ichthyol are efficient pain relievers and reducers of congestion. In diffuse chronic inflammation of the prostate, larger quantities of these drugs may be used per rectum, and, if there is much pain, especially if so severe as to cause loss of sleep, these may be combined with opium and belladonna. The following is recommended by him as giving prompt relief:

R Iodoformi		
Ichthyol, aa.....	3ii-iv	8-16
Ext. opii.....	gr. xii	75
Ext. belladonnæ.....	gr. iii	20

M. Ft. suppos. No. xii. Sig.: Insert one into the bowel as often as may be needed to relieve pain.

He further states that counter-irritation may in some cases serve a useful purpose when applied to the perineum and hypogastrium in the form of sinapisms or blisters; however, such procedures should be omitted in the treatment of such conditions in the aged.

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SUCCESS OF SCLAVO'S ANTI-ANTHRAX SERUM.

The *Gazetta degli Ospedali* states that eight persons were taken sick after eating meat from a steer that had died from anthrax. All promptly recovered after a treatment by injections of Sclavo's anti-anthrax serum at the Siena University Clinic. Fourteen other persons in a similar epidemic at Santa Croce were cured by the same means, and others at Castel and Colle Val. Alberto describes in detail in the issue for September 1, another severe case cured by the serum six months after the date of manufacture. Sclavo offers his serum free of charge to physicians on request.—*A. M. A.*

EFFECT OF TYPHOID BLOOD SERUM ON TYPHOID BACILLUS.

Dr. M. W. Richardson reports (*Jour. Med. Research*), the results of a series of experiments upon the effects of blood serum, particularly the blood serum of typhoid fever patients, upon the typhoid bacillus. Lack of space prevents a description of the details of these experiments being given here, and we only give what appears to us to be the important results contained in this most interesting and suggestive paper.

He finds that the serum of normal individuals and of typhoid patients convalescing, or in the later stages of the disease, has a marked destructive action upon the typhoid bacillus, while the serum of typhoid patients in the early or middle stages of the disease has not this power. If, however, the serum of a normal individual and the serum of a typhoid patient in the middle or early stages of the disease are allowed to act together upon the typhoid bacilli, the typhoid bacilli are destroyed.

Following the hypotheses of Pfeiffer, of Bordet, and of Ehrlich concerning the nature of immunity, Richardson explains these phenomena on the assumption that in the later stages of, or convalescence from typhoid fever, the blood serum contains two elements, the combined action of which produces the destruction of the bacilli and the recovery of the patient. In the earlier stages of the disease one of these elements, which is present in the blood serum of a normal individual, is lacking.

Upon this hypothesis, and in the light of these observations, the rational treatment of typhoid fever would seem to be to supply to the blood of the patient serum containing the element lacking for the destruction of the typhoid bacilli; that is, normal serum.—*Boston Med. and Surg. Journal*.

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DIRECT MEDICINAL INJECTIONS IN LUNGS.

The *Union Med. du Nord-Est* of July 30 contains a communication from G. Rosenthal, describing the great benefit to be derived from direct injection of medicinal substances into the trachea, just below the cricoid cartilage, the patient's head being bent slightly forward. There is no coughing nor any kind of spasm, and the fluid can be injected as slowly as is desired. He uses a needle, as for hypodermic injection, connected by a rubber tube, with the receptacle holding the medicated solution. Absorption through the lungs proceeds as rapidly as through the veins, he asserts, and the lung tissue can thus be directly influenced. He sometimes leaves

the needle in place for a week at a time, renewing the injection each day, and afterward inserting a stopper and fastening it in place with collodion.—*A. M. A.*

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THE MICROBE OF DYSENTERY.

Dr. Lesage, physician of the Paris hospitals, who is a well-known bacteriologist, especially in intestinal affections, has just published in the *Presse Medicale* of August 17 a short notice on a microbe of dysentery. An extract of this will be of use as a means of comparing it with what has been recently discovered in the Philippine Islands, and with Shiga's bacillus. Dr. Lemoine was able to examine a large number of cases of dysentery in the service of Dr. Galliot, at Toulon, and he was able to note the following facts: 1. In cases of dysentery from China, Cochinchina, Algeria or Toulon, there is to be found a micro-organism the number of which increases with the progress of the disease and diminishes when convalescence sets in. 2. This parasite is polymorphous, either a micrococcus or streptococcus, generally seen as a diplococcus with equal or unequal grains. In the latter case the micro-organism has the appearance of a balloon with its basket. 3. This microbe is discolored by Gram's method, does not coagulate milk and does not grow on potatoes. 4. It is to be found in the various intestinal products of dysentery, and after death in the veins of the mesentery and the glands of the same order. 5. Injected into the rabbit and guinea-pig, it produces septicemia without intestinal localization. With the cat, however, there is localization on the large intestine, with lesions identical to those observed in man.—*A. M. A.*

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AN AID TO SEASICKNESS.

R. Heinz, *Munch. Med. Woch.*, calls attention to the close proximity of the vomiting and respiratory centers and describes an experiment on dogs which showed that by inducing apnoea by artificial respiration it is possible, so far, to inhibit the vomiting center as to nullify the effect of emetic subcutaneous doses of apomorphine. Further observations led to the discovery of the fact that by taking several deep breaths in rapid succession a state of sufficient apnoea can be voluntarily produced to counteract vomiting stimuli, and the author recommends that in seasickness, at each crisis, this method be taken to forestall the threatened vomiting.—*Med. Rec.*

UTERINE IRRIGATION.

Fitzgerald (*Med. Mirror*), advises the use of free intra-uterine irrigations in cases of infection in preference to the curette. He has been making use of the irrigation in all septic and toxic-genetic troubles, but especially in puerperal conditions where he thinks its benefit has been most apparent. He advises irrigation well up to the fundus, flushing of the uterine cavity with carbolized water by reflux irrigator with a fall of two feet, and, while it is still in the uterus, the douche is detached and, by means of a short tube, a small glass funnel is attached which should be held about fourteen inches above the end of the irrigator and a little peroxid of hydrogen introduced at a time, giving time for action of each addition. He would repeat this operation after several hours and has found this method very satisfactory in cases of uterine infection. The curette should be used less frequently and more reliance placed upon the stimulating, unirritating, intra-uterine douche and free drainage, preceded always by thorough removal of all infected matter that can be taken away without injury to the normal structure, with subsequent irrigation, repeated as indicated.—*A. M. A.*

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ICHTHYOL BATHS.

It appears that we must add to the other therapeutical actions of ichthyol certain prompt and decided effects upon the blood. Schutze (*Deutsche Midizinal-Zeitung*, 1901, No. 32; *Fortschritte der Medicin*, July 22d) has been using ichthyol baths in various forms for anæmia, in gouty conditions, and in diabetes, and he has constantly observed that after the baths the amount of hæmoglobin in the blood was increased from twenty to forty per cent., and that the number of the red corpuscles rose by from a million to a million and a half. This effect was often recognizable after three baths, and always after fifteen or twenty, but the author has never witnessed it after ordinary warm baths. In a diabetic, hand in hand with the increase of hæmoglobin there was a reduction of the amount of sugar in the urine from 1.3 to 0.24 per cent. The blood examinations were always made twenty-four hours after a bath, so that the erythrocytosis due to a warm bath had not to be taken into account. To a bath of about sixty-two gallons he adds rather less than two ounces of ichthyol. The temperature of the bath is 95 degrees F., and its duration is from ten to fifteen minutes.—*N. Y. Med. Jour.*

TANNIN AND BROMIN IN TREATMENT OF PRURITUS.

Joseph, in *Med. Standard*, states that an ointment containing bromin and tannin is of great service in the treatment of all forms of pruritus. The bromin, according to his statement, is used for its anesthetic properties and the tannin for its astringent effects. He prescribes an ointment composed of bromin 20 per cent. and tannin 40 per cent. He states that the action of this ointment is increased by the alkaline secretion of the skin, without producing any irritation. He uses as a base a 10 to 30 per cent. jelly.

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COCAINE IN TREATMENT OF PAIN IN GASTRIC CANCER.

The following combination has been recommended in relieving the pain in cases of carcinoma of the stomach:

R	Cocainæ hydrochlor.....	gr. ss	03
	Morphinæ hydrochlor.....	gr. $\frac{1}{6}$	01
	Aq. calcis.....	℥iii	96

M. Sig.: One coffeespoonful every hour in a tablespoonful of iced milk.

An ice bag may be placed at the epigastrium to aid in relieving the pain. —*A. M. A.*

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TO CHECK GASTRIC FERMENTATION.

The following is recommended by Ewald to prevent the process of fermentation in the stomach:

R	Resorcin.....	gr. lxxxv	5
	Bismuthi salicylatis		
	Pulv. rhei rad.		
	Sodii sulph., aa.....	℥iiss	10
	Sacch. lactis.....	℥iv	15

M. Ft. chart. No. 1. Sig.: One half teaspoonful twice daily. —*A. M. A.*

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PREVENTION OF TUBERCULOSIS.

The Minister of Public Works of France has sent a circular letter to all railway companies, pointing out the best manner in which to combat the propagation of tuberculosis among their employes. The companies are already very careful, accepting only applicants shown by medical examination to be free from the malady. The future aim will be to give outdoor positions to those who have contracted it since entering the service.—The Prussian

School Inspectors are paying particular attention to the prevention of the disease. The Minister of Public Instruction has recently sent to the Department of School Inspection copies of a pamphlet written by an American physician on this subject, with an order to the inspectors to consult with the teachers regarding preventive measures.—*A. M. A.*

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PNEUMONIA.

The utility of venesection followed by saline infusion is argued by Porter (*Interstate Med. Jour.*), who does not, however, advocate the method to the seclusion of others. The rationale of the treatment is discussed by him and he says he believes the whole treatment of labor pneumonia may be summed up in a brief formula: conserve the strength, guard the heart and diminish the toxins. It is a self-limiting disease, but should be helped over the severer places. The mortality is at present greater than it should be, and the early routine and reckless use of heart depressants are responsible for disasters at later stages. He reports a case in which he considers venesection and saline solutions saved the patient, where ordinary remedies would have failed.—*A. M. A.*

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APOMORPHIA.

Pugh (*Tex. Med. Jour.*), recommends the use of apomorphia in cases of asphyxia to stir up respiration, and would give it hypodermically in the arm or over the stomach in .10 gr. doses every ten minutes. He reports a case where he aroused a man in this way who had been reported dead by two physicians after suffocation from coal gas. He would also use it in drowning and lightning stroke and opium poisoning, though its effect as an emetic if given early would be self-evident in this last case. We have in it also one of the valuable remedies in retarded labor, due to rigid os, and in cases of strangulated hernia, where it produces relaxation; this alone with gravitation often relieves the condition. He says he has treated a number of strangulated cases in this way and always with success.—*A. M. A.*

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PUERPERAL FEVER.

(*A. Hegar, Munchener Med. Wochenschrift*).—If the temperature does not rise beyond 101 F. after delivery, and if there are no local symptoms, Hegar restricts intervention

to removing obstacles to the free flow of the discharge and irrigating the vagina. Temperature of 102 and over indicates drainage, if it persists more than twenty-four hours. Besides the temperature, accelerated pulse, rapid respiration, sleeplessness, tendency to cyanosis and local symptoms are accessory indications for drainage. Hegar thinks that washing out the uterus once or thrice a day is absolutely useless. For several decades he has made a practice of permanent drainage of the uterus, leaving the canula in place and repeating the irrigation every one or two hours. He prefers for the purpose a double glass canula with even the olive divided into two parts, allowing free inlet and outlet to the fluid. He maintains this irrigation and drainage for forty-eight hours, repeating it after suspension for twelve hours, if necessary. He considers chlorin water the best antiseptic for the purpose, and uses it in a 12 to 25 per cent. solution.—*A. M. A.*

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THREE POINTS IN PRACTICAL MIDWIFERY.

G. W. Ord.—The three points in practical midwifery mentioned by Ord (*The Lancet*, Sept. 21, 1901), are as follows: 1. That the catheter is capable of saving life in the course of breech delivery. He had a case where the body was born and cord pulsating; the head, however, stopped and the cord ceased pulsating, and it seemed that the child would be born asphyxiated. He had a catheter in his bag, a silver, male instrument, and feeling his way he passed it into the child's mouth, who cried down the catheter, the chest became inflated and in a few minutes the head was born, and everything was satisfactory. In looking up the literature he found the plan suggested but not specially recommended in Playfair's work, but the case had been a surprise to every medical man to whom he has mentioned it. The catheter did its work perfectly and in such cases where the necessity of delay of three or four minutes occurs in the birth of the head, the value of this method is obvious. 2. Another point to which he calls attention is the matter of hour-glass contraction. He has in his experience found this frequently after experimental delivery and for the last six or eight years he has pursued the method of "expressing" the child after the birth of the head and has had no hour-glass cases when he has been present before the birth of the child. It seems to him that the cause of hour-glass contraction is due to quick delivery by traction of the child and is avoidable if the *vis a tergo* method only is employed. 3. This is that scoliosis is possibly caused by traction on

the infant's body during birth, and that we should realize the damage we may be doing to the spine when pulling in the various directions, as we are advised in text books. Besides the possible scoliosis another danger may occur, the suprarenal capsules may be injured. He quotes from Clifford Allbutt, who says that hemorrhages in these bodies frequently occur as results of traumatism during birth. Such hemorrhages occur more often in difficult labors and are more frequently met with in pelvic and cephalic presentations. He believes in the soundness of the use of the catheter with an after-coming head, if any hitch occurs, as opposed to traction.—*A. M. A.*

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BICYCLING: ITS INDICATIONS AND CONTRAINDICATIONS.

By means of a gasometer attached to a bicycle the air expired by the rider has been collected for analysis, and the amount of energy liberated in the course of metabolism by this form of physiological exercise has thus been estimated. L. Zuntz (*Fortschritte d. Med.*, Sept. 22, 1901) shows that a rider who covers 15 kilometers in an hour liberates ten per cent. more energy than does a pedestrian who walks 6 kilometers in the same period; if the wheelman rides 21 kilometers the energy requirement is almost twice as great as that of the 6-kilometer pedestrian. Inasmuch as bicycling involves so extraordinary a consumption of energy and is accompanied by relatively slight sensations of fatigue, its place in the treatment of obesity would seem to be theoretically established. Like all active muscular exercise bicycling diminishes the quantity of sugar in the urine in diabetes. In slight degrees of anemia bicycling is of advantage as a stimulus to metabolism; in severe cases this form of exercise makes such demands upon the heart that it is contra-indicated. The use of the bicycle favors assimilation in chronic obstipation. Earlier literature contained frequent references to cases of inflammation of the knee-joint, said to be due to bicycling. Recently such cases have ceased to be reported, and it is probable that those originally cited related to individuals predisposed to arthritis. Faulty posture while riding no doubt leads to spinal deformity, and the danger of this result is especially to be guarded against in youthful riders. F. A. Schmidt goes so far as to advise that riding be forbidden to all children under twelve years of age. Many writers have recorded happy results from the adoption of wheeling by neurasthenics.—*Med. News.*

PRESIDENT'S ADDRESS AT THE ANNUAL MEETING OF THE NEW YORK
STATE MEDICAL ASSOCIATION, OCT. 21-24, 1901.

Comments on Some New Surgical Methods.—Dr. John Allan Wyeth of New York delivered an address on the above theme. He first took up medullary narcosis, or intraspinal cocainization, and held that it was manifestly unfair not to give full credit for the discovery of this method to Dr. August Bier. The published observations of our countryman, Dr. J. Leonard Corning, had not really covered the same field. The speaker said that he would not hesitate to employ it in persons who had a strong prejudice against the usual general anæsthetics. The technique recommended was that already described by Dr. W. R. Stone of New York. Cocainization and a small incision should precede the introduction of the needle, and it was well to allow a quantity of cerebrospinal fluid to escape equal to that to be injected.

Obliteration of Blood Vessels by Injection.—The speaker said that Dr. R. H. M. Dawbarn's method of starving inoperable neoplasms by ligation of the main artery supplying them had suggested to him that something might be accomplished by injecting some fluid which would cause an obliterating endarteritis. In January, 1901, he had undertaken experiments of this kind on dogs. Boiling water had been injected into the external carotid, and it had been found that it was possible in this way to obliterate an artery down to its terminal branches. An encouraging result by this method of treatment on the human subject was reported.

Prostatectomy.—The various methods of performing prostatectomy were detailed, and the statement made that the mortality of this operation had fallen steadily, keeping pace with improvements in technique. Dr. Wyeth said he looked upon this operation as one of the most valuable contributions to surgery made in the last decade.

Removal of the Ovaries in Cases of Cancer of the Breast.—This interesting topic was briefly touched upon, and the statement made that the results had been sufficiently encouraging to justify the continuance of these experiments.—*Med. Rec.*

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DIPLOCOCCUS SEMILUNARIS, AN ACCOMPANIER OF TUBERCULOSIS.

E. Klebes describes, *Munchener Med. Woch.*, Oct. 1, 1901, an organism which he has so often encountered in connection with tuberculosis as to cause him to attach importance to it. It is found in the tonsils of tuberculous patients, and its occurrence in greater

or less number in these regions gives an idea of the powers of resistance of the patient; when present in abundance, it indicates a less favorable prognosis and diminished capacity of resistance. It is observed not only in pulmonary tuberculosis, but also in bone and joint disease as well as in tuberculosis skin lesions, and it may possibly have something in common with the organism described as the germ of articular rheumatism. It also has a relationship to vesical catarrhs and is observed with great frequency in the body of the house fly, from whose crushed head it may easily be obtained in pure culture. Its pathogenic powers are shown by the author's experiments, in the course of which he was able to produce fatal adenitis and pulmonary tuberculosis. The significance of such mixed infections is very marked in tuberculous bone and joint lesions, which become rapidly progressive when the diplococcus semilunaris is present in large numbers.—*Med. Rec.*

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PROSTHETIC SUBCUTANEOUS INJECTIONS OF PARAFFINE.

A. E. Stein reports, *Deutsche Med. Woch.*, Oct. 3, 1901, very good results from the subcutaneous injection of paraffine for the purpose of replacing defects following various forms of trauma or disease. Missing testicles or defects due to accident or cicatricial contraction can be replaced in this way with good cosmetic result, and incontinence of urine or fæces due to damaged sphincters can be wholly relieved. The two points that require consideration are the possible toxic effects that may be produced by the slow absorption of the mass from the tissues, and whether pulmonary embolism can occur through the entry of the still-fluid paraffine into the blood current. The author's experiments show both of these dangers to be minimal; for in mice one-third of the body-weight of paraffine could be injected without bad effects, while in a very large number of injections no pulmonary symptoms developed. The mass to be employed should be absolutely sterile and have a melting point of from 42 to 43 degrees C. If the melting point is much lower than this the proper form is not retained, and if it is too high, local irritation is produced, often ending in gangrene. In favorable cases it is probable that the mass is invaded by a gradual fibrous ingrowth from the surrounding parts, giving it permanence and firmness. Not more than about a gram should be injected at a single sitting. The operation is not painful, and the patient usually is not kept from his work. Several photographs show good results in cases of saddle-nose and cleft palate.—*Med. Rec.*

THE EARLY DIAGNOSIS OF ADDISON'S DISEASE.

Among the most curious of diagnostic procedures, we venture to say, is one described at a recent meeting of the Hospital Medical Society, of Paris, by Jacquet and Tremolieres (*Gazette hebdomadaire de medecine et de chirurgie*, July 25th). In a tuberculous subject these gentlemen have been able to produce bronzing of the skin at will by somewhat prolonged applications of linseed-meal poultices, either plain or slightly sinapized. They suggest that by this means one may make a diagnosis of Addison's disease before melanoderma has taken place. On the two heels of their subject they produced bronzing of the same degree, although one leg had been exsanguinated with an Esmarch bandage, and this fact, they deduce, makes in favor of the autochthonous production of the cutaneous pigment in the Malpighian layer.—*N. Y. Med. Jour.*

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DILATATION AND ENDOMETRITIS.

A logical and scientific parallel between abscess-cavities and discharging sinuses on the one hand and on the other hand simple chronic catarrhal or chronic purulent endometritis and obstructive dysmenorrhea is set forth by F. Franke (*Zeitschr. f. Geburtsh. u. Gynak.*, 1901, B. 45, H. 3). In the former conditions the old surgical law is well established and obeyed, that free evacuation must be had and complete drainage maintained. In all the forms of endometritis free evacuation and complete drainage are the rational indications, because retention here means threatened or actual extension to the adnexa. In obstructive dysmenorrhea it is the very fact of the existence of an obstacle to the outflow of the blood and the clots which cause the pain. Franke seeks to apply the surgical law cited above to these gynecological conditions by inserting a rubber drain-tube into the uterine cavity well within the internal os, but not up to the fundus. Contact between the tube and the fundus, would result in troublesome contractions. After dilatation, which must be deliberately done, the tube is threaded over a sound and thus passed in. It is retained in situ by a couple of threads lightly caught in it and in the cervix uteri. Its bore must be free, to permit ready drainage, and its walls thick enough to be resistant. It can be retained in situ until the stitches cut through, under the usual precautions of antiseptic vaginal douches, and then replaced. Confinement to bed over the first few days is not essential. When a stenosis exists Franke resorts to twelve or fif-

teen small incisions around the entire periphery of the cervical canal, which permit of spreading without tearing and in healing are covered with mucous membrane, not scar-tissue and therefore do not contract again, perhaps to a higher degree than before the operation. In the cases he reports (two) results were permanent and without retrogression at the end of a year or more.—*Med. News.*

* * *

ANEURISM OF THE ASCENDING BRANCH OF THE AORTA.

Barth notes in the *Munchener Medicinische Wochenschrift*, No. 14, 1901, that interest has been reawakened lately in aneurisms by the possibility of demonstrating their presence by means of the X-rays, and by the possibility of curing them by gelatin injections. He gives in detail a history of a case in which the symptoms were apparently those of an aneurism of the ascending portion of the aorta. The patient complained of shortness of breath and pain, and was slightly cyanotic. Pulsation was felt in the right infraclavicular region. Bruit and all concomitant symptoms were present. In addition to the large aneurism the patient was suffering from mitral insufficiency, emphysema, tracheitis, and bronchitis. Since Lancereaux asserts that the sacculated aneurisms are more amenable to gelatin treatment than those of the spindle form, Barth, finding that ten ergotine injections made in the region of the aneurism were fruitless, made twelve injections of a one-per-cent solution of gelatin which had been sterilized by heat. The injections were made in the cellular tissue of the lumbar region and caused very little suffering. As a result of these injections there was an apparent improvement. Three months later a second course was ordered, beginning with a two-per-cent gelatin solution, which was increased until a five per-cent solution was employed. The injections were repeated every second day. As a result of these injections it is to be noted that dyspnea was less marked, that the pain in the back and arms was the same, that the swelling was markedly diminished and firmer, and that the pulsation was less distinct.

It is noteworthy that in addition to the gelatin injections during the first part of the cure the patient was put to bed on a low diet, and was given potassium iodide, together with the external application of cold.

Barth commends this method of cure not because he believes it is reasonably certain, but because he believes it may be helpful and at the worst can do no harm.—*Thera. Gaz.*

THE TREATMENT OF SYPHILIS, WITH SPECIAL REFERENCE TO THE
BEST METHODS OF ADMINISTERING MERCURY.

The author, Winfield Ayres, M. D., calls to mind the facts that mercury has been used in the treatment of syphilis for over 400 years, and there are few physicians, to-day, who do not use it in some form. Although the method of treatment with mercury is still discussed, he is firmly of the opinion that there is no hope of eradicating the disease unless the full dose is given constantly for something like three years. The treatment should begin just as soon as the diagnosis can be made. There is no ground for supposing that enucleation of the chancre has the effect of aborting the disease. If a positive diagnosis cannot be made from the appearance of the initial lesion, general tonic treatment should be instituted.

In some cases the protiodide controls the symptoms, but in the majority it is of very little use. Experiments with Mercuriol were conducted at Bellevue hospital, for eight and a half months, with 180 cases; the histories of 95 of these are recorded. The remainder could not be kept under observation and are therefore passed over. The dosage of the Mercuriol, regulated either by reaching the point of tolerance or control of the disease, varied from one half to six grains. In 64 of the 95 cases the disease was controlled as follows: in two weeks, 8; three weeks, 12; four weeks, 14; five weeks, 6; six weeks, 5; seven weeks, 2; two months, 8; ten weeks, 2; three months, 5; and four months, 1. The remainder are marked thus: decidedly improved, 17; improved, 8; no improvement in two weeks, 3; no improvement in four weeks, 1; and no improvement in three months, 2. The latter were all dispensary patients and it is uncertain whether they took their medicine regularly.

The writer states that his plan was to increase the dose steadily from one grain until the symptoms were controlled, or until there was a slight tendency on the part of the teeth and gums to become tender. If the symptoms were not controlled before the physiological effect of the Mercuriol made itself felt, small doses of potassium iodide were added, and in every case where the Mercuriol was taken according to directions, with the exceptions noted above, the symptoms were controlled.

In 67 out of the 95 cases tabulated, no other medicine than Mercuriol was given. In 15 out of the remaining 28, the addition of iodide of potassium was found to be sufficient to control the dis-

case, while in 6 others the addition of an iron tonic sufficed for this purpose.

The cases are not reported at length, but a few of the more remarkable results and some cases in which other medicines failed to control the disease are briefly mentioned.

Case 1 had been taking bichloride for one month with very little improvement. Under Mercuriol, three grains maximum dosage, the symptoms were under control in five weeks.

Case 2 had been under biniodide of mercury (one-sixteenth of a grain) and potassium iodide (five grains), which caused iodism. His symptoms were controlled in one month under half a grain of Mercuriol.

In case 3 unguentum hydrargyri had failed to control the disease. The patient was put on Mercuriol and the dosage pushed up to six grains three times a day. The disease was thoroughly under control in seven weeks.

Case 4 had been on three-eighths of a grain of biniodide of mercury and twenty grains of potassium iodide for two months. The medicine caused nausea and vomiting. Having been put on Mercuriol and the dosage gradually increased to five grains three times a day, the symptoms were controlled in three weeks.

Case 5 had been taking hydrargyrum bichloride (one-twelfth of a grain) three times a day, under which an eruption on his face had faded, but the eruption on his body still persisted. His symptoms disappeared in two weeks under a maximum dose of three grains of Mercuriol three times a day.

Case 6 had been on bichloride of mercury (three-sixteenths of a grain) for three months, in spite of which he had palmar syphilide of an eczematous variety. All appearances of the disease disappeared after he had been one month on Mercuriol, his maximum dose being three grains three times a day.

Case 7 had been taking one-quarter of a grain of Mercuriol and fifteen grains of potassium iodide, with the result that the eruption had decidedly improved, though not to the extent that it should have done. There were thickened red patches on the face, covered with scaly eruptions. The symptoms almost entirely disappeared within three weeks under a maximum dosage of five grains of Mercuriol three times a day and fifteen grains of potassium iodide.

Case 8 had been treated with inunctions of mercury, under which the eruptions disappeared, but the pains in the bones still

persisted. He was relieved in three weeks under a maximum dosage of four grains of Mercuriol three times a day.

Case 9 had been taking other forms of mercury for six months. The form which had done him most good was bichloride. Yet one-fifth of a grain did not entirely control the disease. He had been taking that for two months when he was placed on Mercuriol. The dosage in his case was pushed up to six grains three times a day, and at the end of seven weeks all his symptoms had disappeared.

Case 10 had been taking medicine off and on for two years, but his symptoms never disappeared entirely. After being two weeks on Mercuriol (two grains three times a day) with the addition of potassium iodide, all symptoms had disappeared.

Ayres, in conclusion, states that he uses Mercuriol in his private practice to the exclusion of all other drugs. His experience is that he gets better results. He has found no form in which mercury can be given with such good results as in that of Mercuriol.—*The Lancet*.

* * *

CAN A SEPTIC BULLET AFFECT A GUNSHOT WOUND.

The unexpected ending of President McKinley's illness brought for the moment the suggestion before the public eye that possibly the bullet of the assassin had been poisoned. Curiously enough this is a subject upon which the medical profession as a whole knows almost as little as the general public. This is natural, for in civilized life warfare such a procedure is not countenanced, while the poisoned arrows of the savage have disappeared along with the savages themselves. The medical profession, it can be said in passing, have been benefited by the knowledge they have gained of the poison used by savages on their arrows and darts, for curare and strophanthus are now included in the pharmacopœia.

It has been the popular belief among army experts that projectiles were purified by the act of firing; Esmarck, Volkmann, and Bruns have been prominent advocates of this idea. The most scientific investigation of this subject has been done by Captain Lagarde of the United States army, and the conclusions he came to differ materially from that of the three authorities just quoted. One point which he conclusively decided and which is a side issue on the question is that the majority of projectiles as they come from their original passages are free from septic germs, so that

the ordinary bullet fired from the ordinary pistol or gun or rifle is not likely in itself to set up sepsis. He then took bullets and infected them by smearing the conical end of the lead with the culture of anthrax germs. He then shot a number of rabbits and a bull calf, using both a revolver and a modified Springfield rifle. In every case it was found that the anthrax bacilli had filled the blood in abundance and were found in the liver, lungs, spleen and kidneys.

Captain Lagarde then used the streptococcus of erysipelas, the bacillus of tetanus, and the bacillus pyogenes soli with the same results. He then took up the question whether a bullet can become contaminated in transit after leaving the rifle. He found that the old leaden projectile which deforms so readily in ricochetting carries septic matter upon its irregular surface, but that the projectile of the new armament, which is made up of a leaden nucleus encased in a hard envelope of German silver or nickel steel which makes a polished projectile with a hard exterior does not become infected in ricochetting unless it becomes deformed, which seldom happens.

There is another source of local infection which may be produced by the bullet wounds. This is that the patient's clothing at the point where it is pierced by the bullet may be old and dirty, and hence not aseptic, or his skin at the wound of entrance and exit may hold on it specific germs. All these points Captain Lagarde regards of great value, especially from the medico-legal aspect, for he thinks that it is only a question of time when surgeons will be held accountable by the public for inflicting sepsis in wounds, and that, therefore, the question whether he has caused the existence of blood poisoning, or whether it is due to the missile, is of great importance.—*Med. Times.*

* * *

BUFFALO EVIDENCE.

A careful inspection of the mortality statistics shows that in Buffalo, where cancer is especially frequent, certain wards have many more cases of cancer than others. These wards are principally inhabited by Germans and Poles, who suffer five times as frequently from malignant diseases as the inhabitants of other parts of the city. Among these people cancer of the stomach occurs ten times more frequently than is the average in the rest of the population. It would seem then that something in their diet favors the development of cancer. These statistics would lead one to suspect

parasitic nature of cancer. The material is, however, too small for a definite conclusion in the matter. A careful collection of clinical material in this matter will undoubtedly bring us precious information and the collection of such clinical material only requires the co-operation of intelligent physicians throughout the country to make it of immense value.—*Med. News.*

* * *

A CURED CASE OF TETANUS.

Prof. von Leyden (*Deut. Med. Woch.*, No. 29, 1901) reports the case of a twenty-two-year-old groom who was admitted to the hospital on the third day of his illness with typical symptoms of tetanus. Ten cubic centimeters of cerebrospinal fluid was withdrawn and injected into mice, confirming the diagnosis. He at once received a subdural injection of five cubic centimeters of tetanus antitoxin, which was repeated in three days. The action of the antitoxin was brilliant; before the first injection the temperature was 105.8 degrees, and afterward on the same day sank to 101.6 degrees, the following day to almost 99 degrees. The effect on the temperature, the author believes, is most important, for he has never seen nor does he know of a case in the literature where recovery took place after the temperature reached 105.8 degrees. After the injections the case ran the usual course, with well marked trismus, and in the fifth week was fully convalescent. Chloral was used in preference to opium as a sedative, and the nutrition was carefully attended to.—*Med. Age.*

* * *

NERVOUS DISORDERS ASSOCIATED WITH ABNORMAL TONSILS.

Alexis Berest (*These de Paris*, 1901; *British Medical Journal*), deals with the nervous disorders which arise from an abnormal condition of the tonsils, and most of which are the result of reflex disturbance starting from hypertrophy of the glands. The contact of these bodies with the base of the tongue is often sufficient to provoke nausea and efforts towards vomiting, which may be produced not during meals but during the intervals. Among the rarer disturbances is spasm of the esophagus, of which a case was recorded by Senez (*These de Paris* 1893) concerning a sailor who suffered for several years from dysphagia, and was treated with antispasmodics without result. Ablation of the hypertrophied tonsils produced considerable improvement in this case. Cough is also produced by enlarged ton-

sils. The mechanism in this case is preferably pressure upon, and irritation of, the pillars of the fauces and consequently of the palatal twigs of the trigeminal nerve. The character of the cough is in these cases dry and hissing as in quinsy. Less frequently spasm of the glottis may be excited, or even attacks of bronchial asthma, of which several instances were published by Schmidt in 1877. Where the enlarged tonsils press upon or obstruct the pharyngeal orifice of the Eustachian tubes some degree of deafness may result. This may be due to mere mechanical obstruction, or to the production of a local nasopharyngeal catarrh, or according to Noquet, to paresis of the dilator of the Eustachian tube. The last observation has been confirmed by Weber-Liel in 1873 and by Woakes in 1879. Ocular and visual disturbances are uncommon, the better known of these being blepharospasm and asthenopia. Paresthesiæ of the throat and tongue, including feelings of globus, may arise in a similar way, and Boulay records an interesting case of neuralgia of the tongue thus produced, and which was cured after excision of the hypertrophied tonsils. The enlarged tonsils may be either firm and fibroid, or soft. In the latter form the coexistence of adenoids of the nasopharynx has often been established. Treatment consists in partial excision of the enlarged glands and local applications of a sedative character.—*Med. Age.*

* * *

TWO CASES OF CUTANEOUS CANCER CURED BY ARSENIC PASTE.

Dr. M. L. Heidingsfeld presented two cases at the September meeting of the Academy of Medicine, as follows: The two patients which I wish to present this evening complete a series of ten out of eleven consecutive cases of cutaneous cancer which have been completely cured by means of the application of an arsenical preparation, prepared according to the following formula:

℞	Pulv. acidi arsenicosi, . . .	}	aa 5.0
	Pulv. gummi arabici, . . .	}	
	Cocain, mur. cryst., . . .		1.0

M. Add 33 per cent. glycerinated water qs. ad ft. paste. Apply locally on linen cloth for twenty-four to forty-eight hours.

Case No. 1 is an epithelioma of the chin, which originated from a papilloma of fifteen years' duration, and has been in active ulceration for the past two years, in an individual eighty-two years of age. At the time of patient's first visit, August 26, 1901, it was a fungating mass, size of a silver half-dollar, possessing an infiltrated raised border, as shown by the lantern reproduction. This

evening, after an interval of thirty-two days, patient is presented as entirely well, with the affected surface smooth and completely cicatrized.

The second case is an epithelioma of seven years' duration, in a woman seventy years of age. It had a very extensive distribution, covering a large area of the forehead, presenting deep indolent ulcers, as evidenced by the photographic lantern reproduction taken on date of her first visit, April 10, 1901. Progress towards recovery has been necessarily slow but steady, and patient is presented tonight practically well; one or two small ulcerations, split-pea in size, still remain.

The remaining cases, most of whom have been presented to the Academy from time to time, have made complete and thus far permanent recoveries. The exceptional case is an epithelioma, of 'six years' duration, in a bed-ridden individual, eighty-six years of age. It has induced a very extensive destruction of the nose and upper lip, and has advanced deeply along the internal structure of the nose, so that the case is a hopeless and inoperable one. The paste, however, has effected a very favorable change, and has materially checked the progress of the disease wherever it could be reached.—*Cin. Lancet Clinic.*

* * *

NOTE ON THE DIAZO REACTION IN DIPHTHERIA; ITS DIAGNOSTIC VALUE.

Lobligeois says: The diazo reaction of Ehrlich (*Gaz. des Mal. Infantiles*. Vol. iii, No. 21), is absolutely the exception in diphtheria, and was obtained but five times in 118 cases examined. Of these five, four could be attributed to causes other than diphtheria.—*Arch. Ped.*

* * *

VACCINATION AS A THERAPEUTIC MEASURE IN WHOOPING COUGH.

D. Lofruscio says that (*Semena Medica*, April 4, 1901) children were vaccinated for the first time in 121 cases and revaccinated in 31 cases out of the 152 cases of whooping cough, complicated with bronchitis or pneumonia in many instances, which Lofruscio had occasion to treat last year. He is convinced that vaccination solves the therapeutic problem of whooping cough. Five typical cases are described in detail; in most of them pneumonia and the convulsions ceased as if by magic after the vaccination and although the cough persisted for a few weeks in some cases, it was merely as an ordinary catarrhal cough.—*Arch. of Ped.*

CALDAS'S SERUM IS REJECTED.

Acting Governor General Scott, of Cuba, has received the report of the yellow fever board, presided over by Major Havard, chief surgeon in Cuba, which was appointed as a special commission to investigate the Caldas serum. The findings are: First, that Dr. Caldas has kept his alleged discovery from the study of other scientists. Second, that the claim made by Dr. Caldas that the pathogenic agent of yellow fever is found only in the intestinal tract is in direct opposition to the evidence furnished by the mosquito inoculations and direct blood inoculations made by the board presided over by Surgeon Major Reed. Third, that the attempt made by Dr. Caldas to immunize an individual against yellow fever by means of the vaccine prepared by him has failed. The commission, therefore, recommends that further experiments with the vaccine serum of Dr. Caldas be discontinued. Previous to this report being received Dr. P. Caldas landed in New York. He said the reports that patients he had treated in Havana with his serum and vaccine had died were untrue. The only man the war department had permitted him to vaccinate had recovered. His name, he said, was Paulino Alonzo. The other three subjects who died from the treatment by infected insects, Dr. Caldas declared, he had never seen. He was not permitted to operate on these subjects with his serum and vaccine, and their deaths, in his opinion, were not due to yellow fever, but to blood poisoning, the result of the mosquito bites. Dr. Caldas said that he had practiced medicine in Brazil for thirty years, and for nearly twenty years he had been successful in the use of his serum and vaccine in the treatment of yellow fever cases. Some years ago he imparted his secret to Dr. Belinzaghi, who used it successfully on many yellow fever patients in Havana. Learning of the way that Dr. Caldas had been treated by the war department officials in Cuba, and because a course of experiments had been previously arranged for this fall in Rio Janeiro, the Brazilian government, Dr. Caldas said, had asked him to return home. He sailed on September 5.—*N. Y. Med. Jour.*, Sept. 21, 1901.

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CANCER IN CHILDREN.

Cullingworth reported a case of cancer in an infant only five weeks old; Kaulich, one in a child only a year and a half old. Such cases are rare, but the fact should be borne in mind.—*Modern Medicine*.

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Editorial.

A WORD ON ANAESTHESIA.

The far-reaching benefits accruing from the discovery of anæsthetics require no comment, and it is to be regretted that their administration has not been followed up with the enterprising study and research which their importance and danger would seem to demand. While much yet remains to be learned, yet by a comprehensive study of what is already known, and by the acquirement and exercise of a good technique by the anæsthetist, a far greater degree of comfort could be assured the patient, and the equation of danger reduced to a minimum at the same time.

The choice of the anæsthetic is a matter of no small moment; and is quite equal in importance to the selection of the anæsthetist, for the most harmless of anæsthetics may be beset with many dangers, if placed in incompetent hands.

In the hospitals throughout the country the anæsthetist is usually the newest and most inexperienced interne, without previous instruction in the art of anæsthesia, and if, at any time, his services are not available, the selection of some medical student for the service is not unusual. Often, too, it is painfully evident that the man at the patient's head is more absorbed in watching the different stages of the operation than he is attentive to the anæsthetic.

With this system the operator necessarily has his attention often diverted from the operation, and cannot enjoy the same sense of security and ease of mind that would be his with the knowledge that a skilled and experienced man—a specialist in fact—had charge of the anæsthetic.

Skill in administration can only be *acquired* by considerable practice, and *maintained* by more or less constant practice, and this does not fall to the lot of the average practitioner after his days of hospital work are over.

We have yet to hear of a medical school that gives instruction in anæsthesia. This knowledge is left to be picked up at the expense of the patient later on.

A professional anæsthetist is an accession to be found at present upon the staffs of several of the more progressive hospitals of the country, and we believe that the example might well be followed by every institution in the land. Upon him rests the entire responsibility of the *choice* as well as the administration of the anæsthetic, and it is his duty to instruct the internes in the work. They administer the drug under his immediate supervision, until they become proficient in the art.

There is a wide and unoccupied field at present for the professional anæsthetist, and we trust it may be better filled before long.

G. S. S.

OFFICIAL REPORT OF THE CAMDEN BOARD OF
HEALTH CONCERNING THE CASES OF
TETANUS WHICH OCCURRED IN
PATIENTS WHO HAD BEEN
VACCINATED.

It will be remembered that Camden, N. J., recently suffered from a mild epidemic of tetanus following cases of recent vaccination. To discover the source and locate the blame the Board of Health took the matter up and made a thorough investigation.

In view of the cases of tetanus which occurred in this city after the extensive vaccinating of last summer, it may be of interest to our readers to observe the conclusions of the Camden Board of Health. The following is the report in full:

We have thoroughly investigated the cases of tetanus occurring in Camden, and beg to present to the public the following facts and conclusions:

1. Samples of all the different makes of vaccine employed in Camden have been tested for tetanus germs by the State Bacteriologist of New Jersey, and have been found pure and entirely free from tetanus germs; hence, tetanus could not have been caused by the virus employed. (See report of Dr. Mitchell, Secretary of New Jersey State Board of Health.)

2. The history of each case of tetanus has been carefully collected from the attending physician, and in every instance vaccination was practised in a correct and cleanly manner; the infection of tetanus resulting from neglect on the part of the patients to present themselves to the attending physicians, so that their vaccination could receive proper attention.

3. One case of tetanus has occurred from gunshot wound, during the same period, in a boy who had not been vaccinated, proving that the tetanus germs were in the atmosphere.

4. Indisputable evidence of the fact that the tetanus germs were not introduced at the time of vaccination is that acute tetanus occurs in from 5 to 9 days after the introduction of the germs, whereas in every case acute tetanus occurred in from three to four weeks after vaccination. If the virus had been contaminated, tetanus would have ensued within 9 days after vaccination. Tetanus developed in every make of vaccine used.

5. Further proof of the purity of the virus exists in the reports of the physicians in Cooper Hospital, who tested on animals samples of all makes of vaccine employed in Camden. If

the virus has been contaminated, the animals would have developed tetanus, because of their extreme susceptibility to this disease. (See animal experiments.)

6. During the past five weeks there have been vaccinated in Philadelphia a very large number of people with the same virus as employed in Camden. In not one of these cases did tetanus occur.

7. The tetanus cases in Camden are to be explained on atmospheric and telluric conditions which have prevailed in Camden during the past six weeks. There has been a long period of dry weather with high winds, so that tetanus germs, which have their normal habitat in the earth dust, dirt of stables, etc., have been constantly distributed in the atmosphere. It is noticeable in all the cases, after careful examination as to the cause, that the wound had been exposed by the scab being knocked off or removed, or else the arm had been injured and infection resulted; frequently children scratched the vaccinated area with their dirty fingers and nails and infected the wound.

8. That vaccination should be regarded as a surgical operation and should be performed in an aseptic or clean manner, and in every instance the physician should be consulted for advice if any unusual inflammation should develop.

9. It is the unanimous opinion of the Board of Health, as well as of their committee of experts, that inasmuch as vaccination is harmless, it should be insisted upon by physicians as an absolutely necessary procedure for the prevention of smallpox. Tetanus, or any other infection, can never occur if the vaccination is properly protected from contact with the atmosphere or with soiled clothing, bandages, etc.

HENRY H. DAVIS, M. D., President.

JOEL W. FITHIAN, M. D.

S. G. BUSHEY, M. D.

Committee Board of Health.

CAMDEN, N. J. NOV. 29, 1901.

STATE HOUSE.

TRENTON, N. J., NOV. 26, 1901.

DR. H. H. DAVIS, President Camden Board of Health.

Laboratory examinations of vaccine forwarded by your Board of Health show that no tetanus bacteria were present.

HENRY MITCHELL, M. D.,

Secretary New Jersey State Board of Health.

THE COOPER HOSPITAL,

CAMDEN N. J., Nov. 26, 1901.

We report herewith the result of our experiments with the vaccine virus employed in Camden:

The virus was purchased from fifteen different pharmacies in Camden, and represented those brands of vaccine with which the patients who died of tetanus were vaccinated. All of these samples of vaccine were purchased in the open market without any person's knowledge that they were to be tested for the presence of tetanus germs.

These experiments were conducted in the Cooper Hospital, so that constant and careful observations could be made. White rats were selected because they are extremely susceptible to tetanus, and because in these animals tetanus develops within twenty-four hours after infection. A large number of white rats were inoculated with all the samples of vaccine and kept under observation for five days. Not a single one of the animals has, at any time since their inoculation, manifested the slightest symptoms of tetanus.

The results of our experiments enable us to state positively that the vaccine virus was pure and free from tetanus germs, thus proving that the cases of tetanus which occurred in Camden were not caused by the vaccine employed.

This investigation should remove all fear from the public mind, and should encourage the people toward vaccination as a preventive to a disease which is imminent as an epidemic.

ALEXANDER SCANLIN ROSS, M. D.
S. EDWARD FRETZ, M. D.

PHILADELPHIA, PA., Nov. 27, 1901.

HENRY H. DAVIS, M. D., President Board of Health,
City Hall, Camden, N. J.

DEAR DOCTOR—In answer to your inquiry of even date, I desire to state that our vaccine physicians have vaccinated nearly one hundred thousand persons in the past three months, and during the same period it is safe to state that at least 700,000 persons in Philadelphia have been vaccinated, without a single case of tetanus having been reported to this office.

Yours truly,

J. LEWIS GOOD,
President Philadelphia Board of Health.

WAR DEPARTMENT.

SURGEON GENERAL'S OFFICE,

WASHINGTON, D. C., Nov. 23, 1901.

HENRY H. DAVIS, M. D., President Board of Health,
Camden, N. J.

SIR:—Replying to yours of November 20, 1901, relative to statistics concerning tetanus after vaccination, and the efficiency of vaccination in preventing smallpox, I am directed by the Surgeon General to refer you to the report of the Superior Board of Health of Porto Rico, Major J. Van R. Hoff, Surgeon, United States Army, chairman, period '98-'00, page 117, in which the following statement is made: "The average annual number of deaths from smallpox for the past ten years was 621; the greatest number, 2,362, occurring in 1890, and the least, 11, in 1893. In 1899 there were about 50 per cent. less deaths than in any of the three years preceding. This decrease was due to the vaccination of the island, which was concluded June 30 of that year; 860,000 vaccinations were performed under the direction of the chief surgeon of the department during the four months preceding this date. All the deaths reported in 1899 from smallpox, except one, occurred prior to the day on which the work was concluded. At the rate of 242 for the first six months the annual deaths would have been practically the same as in the preceding three years. During the seven months covered by these statistics but one death has occurred from this cause."

It is stated by Major Hoff that subsequent to the completion of the general vaccination of the Porto Rican population on June 30, 1899, there have occurred, down to the present time, but three deaths from smallpox in Porto Rico—the average annual death rate from this disease being reduced from 621 to less than 1.5, with an apparent saving of 1,239 lives since the date mentioned. No epidemics of variola have occurred since that time in Porto Rico. A slight outbreak of varioloid occurred in the city of Ponce, but it was attended with no deaths and quickly subsided.

Although there were over 860,000 vaccinations performed on a susceptible and generally unvaccinated Porto Rican population, only one death occurred which could be attributed to vaccination. This was due to tetanus, and occurred in a child. Tetanus is, however, an extremely common and fatal disease in Porto Rico, causing no less than 818 deaths on the island during

the seven months, October 1st to May 1st, 1899-1900, or 3.41 per cent. of the total mortality. The occurrence of the case of tetanus following vaccination was undoubtedly due to a secondary infection from an outside source with the widely-distributed tetanus germ.

A second instance illustrating the efficiency of vaccination is given in the report of the Surgeon General of the Army for 1899, page 245, where a brief description is given of the stamping out of an epidemic of smallpox in the district of Holguin, Cuba. In this epidemic, 1,185 cases of smallpox were collected into isolation hospitals by the army surgeons in charge. General vaccination of the Cuban population was practiced and the epidemic was promptly brought under control. It is of interest to note that not a single case of smallpox occurred in the carefully-vaccinated regiment of United States troops which furnished the guards for the lazy natives, performed the work of disinfection of infected buildings, and in other ways were constantly exposed to the danger of contracting smallpox

Respectfully,

EDWARD L. MUNSON,
Captain, Assistant Surgeon, U. S. A.

A REMEDY PROPOSED FOR THE EVIL OF SUBSTITUTION.

There can be no subject of more importance to physicians than the violation of their confidence on the part of a dishonest dispensing druggist. Law will not make a dishonest man honest, but the right law properly executed will prevent a criminal's further infliction of injury upon society. The requirement of a license to all druggists who dispense drugs or medicines, revokable upon the licensee's being convicted of substituting any ingredient drug or medicine other than, and in lieu or instead of, that specified in the prescription, order or request in writing, of any physician, would go a long way to aid in the matter of honestly filling prescriptions. Let the medical societies induce their respective State Legislatures to enact a law requiring such a license, with a simple and practical procedure for establishing the guilt and enforcing the penalty against infraction, and the practice of substitution would soon cease.

Let proceedings for revocation of license be before the court, board, or officer, empowered to issue the license, and be set in motion at the relation of either the Board of Health, a local medical society, or the purchaser upon whom the fraud and imposition had been done, or of the physician by whom the prescription or order was issued or given, or of any person, firm or corporation for whose brand or make of drug or medicine the substitution had been perpetrated. Let the licensing board, court, or officer be empowered to issue citations, subpoenas for witnesses, to administer oaths, and be given all other requisite powers for duly trying the issues and revoking the license of the guilty.—*Exchange*.

NEW BOOKS IN THE CLEVELAND MEDICAL LIBRARY

Purchased:

Cohen: System of Physiological Therapeutics, 1901.

Vol. 1, Jacoby: Electro-Therapy, Apparatus Methods.

Vol. 2, Jacoby: Electro-Therapy, Diagnosis, Therapeutics.

Vol. 3, 4, Weber, Hinsdale: Climatology, Health Resorts.

Progressive Medicine, September, 1901.

Reference Handbook of the Medical Sciences, Vol. 3, 1901.

Donated:

By Secretary: Report Commissioner of Education, 1899-1900.

By Dr. M. Rosenwasser: Dudley, E. C. Diseases of Women, etc., 1898.

By Dr. C. A. Hamann: Journal of Medical Research, Vol. 6, No. 1.

By Dr. C. J. Aldrich: Senn. Principles of Surgery, 1901.

By Secretary: Marshall, C., M. D. Historical Outline of Woman's Medical College of Pennsylvania.

By Secretary: Trans. Assoc. Medical Colleges, 1901.

By Secretary: Trans. State Medical Association, Texas, 1901.

By Dr. H. S. Upson: Trans. American Neurological Association, 1900.

Bergey: Principles of Hygiene, 1901.

Cotton, A. C. Lessons in Anat. Physiology and Hygiene of Infancy and Childhood, etc.

By Dr. Sollmann: Textbook of Pharmacology, 1901.

By Surg. Gen., U. S., Washington, D. C.: Index-Catalogue Library of Surg.-Gen., Vol. VI, G-Hernotte, 1901.

New Books.

THE PHYSICIAN'S POCKET ACCOUNT BOOK, consisting of a manila-bound book of 208 pages and a leather case. By J. J. Taylor, M. D. Price \$1.00 complete. Subsequent books to fill the case 40 cents each, or 3 for \$1.00. Published by the Medical Council, Twelfth and Walnut streets, Philadelphia.

This as the title page indicates, is a book to be carried in the pocket. It is of convenient size, nicely arranged, nicely gotten up. That it lightens the physicians' account keeping there can be no doubt, as each entry can be made at the time of the visit rather than waiting until night, when, more likely than not, the physician is too tired to look after the business end of his practice, and so the entries are neglected. Take a greater interest in the business part of practice and as "Easy Street" is reached we will find more time to take a deeper interest in the scientific part.

A TEXT BOOK OF MEDICINE FOR STUDENTS AND PRACTITIONERS. By Dr. Adolph Strumpell, Professor and Director of the Medical Clinique at the University of Erlangen. Third American Edition Translated by Permission from the Thirteenth German Edition, by Herman F. Vickery, A. B., M. D. Instructor in Clinical Medicine, Harvard University; Visiting Physician to the Massachusetts General Hospital; Member of the Association of American Physicians; Fellow of the Massachusetts Medical Society, Etc., and Philip Coombs Knapp, A. M., M. D., Ex-President of the American Neurological Association; Clinical Instructor in Diseases of the Nervous System, Harvard University; Physician for Diseases of the Nervous System, Boston City Hospital; Fellow of the Massachusetts Medical Society, Etc., with Additional Notes by Frederick C. Shattuck, A. M., M. D. Jackson Professor of Clinical Medicine, Harvard University; Visiting Physician to the Massachusetts General Hospital; Member of the Association of American Physicians; Fellow of the Massachusetts Medical Society, Etc., with 185 Illustrations in the Text, and one Plate. New York, D. Appleton & Company, 1901.

This well-known work is too familiar in America to require any extended introduction. We can give no more concise a review than is contained in the Translator's Preface: "Since the second edition of this translation was published in 1893 seven new editions have appeared in Germany, so that the book has been almost wholly re-written, although it still retains all the merits of the earlier production, with the advantage of being fully in line with the most recent medical investigations. The translators

have kept as close to the original as seemed consistent with clearness. * * * As in the former editions, the translators have substituted specimens of handwriting in English in the chapter on general paralysis for the original in German script. The translators have also added a chapter upon the plague and various notes which they hope may prove of assistance to the American practitioner."

THE MEDICAL NEWS VISITING LIST FOR 1902. Weekly (dated, for 30 patients); Monthly, (undated, for 120 patients per month); Perpetual (undated, for 30 patients weekly per year); and Perpetual (undated, for 60 patients weekly per year). The first three styles contain 32 pages of data and 160 pages of blanks. The 60-patient perpetual consists of 256 pages of blanks. Each style in one wallet-shaped book, with pocket, pencil and rubber. Seal grain leather, \$1.25. Thumb-letter index, 25 cents extra. Philadelphia and New York: Lea Brothers & Co., Publishers.

A Visiting List is an indispensable convenience for the active practitioner. Its carefully adapted blanks enable him at once to note clinical details of every day work, as well as charges and receipts, and to unburden his memory from what can better be carried on paper. It also furnishes him with a legal record necessary for the collection of delinquent bills. One of the best and most convenient of the many publications of this nature is the *Medical News Visiting List*. Its blank pages are arranged to classify and record memoranda and engagements of every description occurring in the practice of the physician, surgeon or obstetrician. The work opens with 32 pages of printed data of the most useful sort, including an alphabetical Table of Diseases with Approved Remedies, a Table of Doses, Sections on Examination of Urine, Artificial Respiration, Incompatibles, Poisons and Antidotes, a Diagnostic Table of Eruptive Fevers, and a full-page plate showing at a glance the incisions for ligation of the various arteries, an invaluable guide in such emergencies. The *Medical News Visiting List* is issued in four styles, adapted to any system of records and any method of keeping professional accounts. It is printed on fine, tough paper, suitable for pen or pencil and durably and handsomely bound in the size of a wallet for the pocket. When desired a Ready Reference Thumb-letter Index is furnished which is an economizer of time.

- A. TREATISE ON THE ACUTE, INFECTIOUS EXANTHEMATA, INCLUDING VARIOLA, RUBEOLA, SCARLATINA, RUBELLA, VARICELLA AND VACCINIA, WITH ESPECIAL REFERENCE TO DIAGNOSIS AND TREATMENT. By William Thomas Corlett, M. D., L. R. C. P. Lond., Professor of Dermatology and Syphilology in Western Reserve University; Physician for Diseases of the Skin to Lakeside Hospital; Consulting Dermatologist to Charity Hospital, St. Alexis Hospital and the City Hospital, Cleveland; Member of the American Dermatological Association and the Dermatological Society of Great Britain and Ireland. Illustrated by 12 colored Plates, 28 Halftone Plates from Life, and Two Engravings. Philadelphia, F. A. Davis Company, Publishers, 1901. 392 Pages.

With special interest we have examined this book by a Cleveland author, and its high scientific and literary qualities give us great satisfaction. It endeavors, evidently, to bring together in one volume, and present more completely and consecutively, knowledge that, hitherto, has been divided between the works on general medicine, those on dermatology and those on pediatrics, and that has, according to the author's opinion, not been adequately presented in any of these departments. It is not strange that works on dermatology have not paid great attention to these diseases, for it is obvious that they can not appropriately be classed as skin diseases, the skin phenomena being only one symptom of many that belong to diseases, presenting more important features. It is true that in works on pediatrics these subjects have been considered almost wholly as children's diseases, their course in adult life being only alluded to by way of comparison, and it is also true that many works on general medicine have presented but few engravings or plates illustrating the exanthemata. The author says in his preface, that "The obstacles in the way of broad clinical study and bedside demonstration in such dangerous and highly communicable diseases as variola, scarlatina, and rubeola render it hazardous, and in many instances, impracticable to impart sufficient instruction to undergraduates. This fact, together with the limited number of special hospitals and wards for the reception of the acute exanthemata at the disposal of many clinical teachers, makes even graduate instruction in this subject one of the most difficult departments of medicine in which it is possible to obtain a sufficient degree of familiarity." While this is, and in the very nature of things must be so, it should also be said to the credit of medical authors and teachers, that we have usually found young graduates recognizing and treating the exanthemata with commendable success, considering these difficulties. If in the

recent epidemic of smallpox many diagnosticians were found to be at fault, the blame should be placed not so much upon the authors and teachers, as upon the fact that smallpox had been a rare disease for many years, and an equal number of errors would have occurred in case of any unusual disease. Besides this, the errors were noted to be among those whose diagnostic skill had never been highly trained in any direction. However, we welcome a book that endeavors to lighten the work of the teacher, and aid the puzzled practitioner.

The treatise begins with an excellent chapter on the early history of the subject, in the preparation of which the author acknowledges his appreciation of the services of Dr. Henry E. Handerson.

The second chapter is a long one—100 pages—devoted to variola, and is perhaps the most valuable as well as the most timely in the book.

The third chapter treats of vaccinia, and does it well. If we were asked to suggest any improvement, we think it would render the treatise more complete to introduce illustrations, as well as descriptions of typical vaccinia, and if possible, of some of the commoner forms of anomalous vaccinia and the complications and sequelae of vaccination.

Under the latter heading occurs the following sentence: "Upon the condition of the tissues, therefore, and their variable resisting power, depend mainly the phlegmonous and ulcerative changes described, although the exciting cause, as previously stated, depends upon the presence of extraneous excitants not necessarily associated with vaccination." There never was a truer statement made than the foregoing. It corresponds exactly with our own experience, and should be constantly borne in mind in these days of illogical but zealous opposition to vaccination. Under "Practice of Vaccination," the author says, "It is usually best not to vaccinate during weaning, teething, change of diet, excessive heat, etc., which may affect the general health of the child. Likewise when debilitated, or during the progress of, or convalescence from, any disease, it may be postponed, unless urgently called for. Vaccination should, if possible, be avoided when erysipelas is in the house, when scarlet fever or measles is in the neighborhood, or when the child is afflicted with any acute disease of the skin, such as eczema or impetigo." He might have added when in proximity to diphtheria or when

presenting enlarged lymphatic nodes. If these and sensible rules are observed, we should hear less about troublesome or disastrous results following vaccination.

The chapter on scarlatina was written by Dr. Edward P. Carter, clinical assistant in Dermatology at the Lakeside Hospital, who has very carefully and systematically presented the subject in all of its aspects.

Dr. Corlett's painstaking examination of the literature of the subject in hand is evident throughout the work. Many instances could be cited, but a fair example is found in his remarks on the enanthem or prodromal spots upon the buccal mucous membrane in measles, the diagnostic significance of which has recently been emphasized by Filatow in 1895, by Canby in 1895, and by Koplik in this country in 1896. The author notes the fact that "nearly all clinical observers have noted the presence of these premonitory lesions," and briefly alludes to the observations of Willan in 1806, Hein in 1812, Dunglison's *Cyclopedia*, 1854, Trousseau 1866, Rehn as quoted by Niemeyer, and Franz Mayr (1852) Ziemszen and Krabler (1861), Barthly and Rilbet (1854), and Monte 1873, all of whom are mentioned by Von Jurgensen as having given particular attention to the prodromal enanthem of measles. He then presents the description of Flint, of Denmark (1880), as quoted by Von Jurgensen, which for accuracy has not been excelled by any writer before or since his time. The beautiful colored plate of the enanthem, as published in the *Medical News*, is inserted by the courtesy of Dr. Henry Koplik. All but six of the illustrations in the book are from original negatives made by Dr. Corlett, and are something admirable. Our own fancy is that the half tones are more instructive than the colored plates, giving, as they do, the minutiae of the lesions and the very texture of the skin, while colored plates always somewhat sacrifice in depicting the color. However, to other eyes this might appear differently. The colored plates are certainly very fine and in their natural colors.

The treatise is a valuable one, and of interest not only to the specialist in dermatology or pediatrics, but to that numerous individual for whom it was mainly designed, the general practitioner, who has to encounter almost daily the difficulties of differential diagnosis and the hundred anxious problems of the anomalies, complications and sequelae of the eruptive fevers.

S. W. KELLEY.

Society Proceedings.

May L. Bassett, Medical Reporter.

CUYAHOGA COUNTY MEDICAL SOCIETY.

Regular Meeting, Oct. 3, 1901.

The first regular meeting of the Cuyahoga County Medical Society this season was held on Thursday evening, October 3, 1901, at the Cleveland Medical Library Building. The meeting opened with the President, Dr. C. A. Hamann, in the chair. The minutes of the last meeting were read and approved and Drs. E. Rosenberg's and Russell H. Birge's names presented for active membership. The Society, upon motion, voted to donate the sum of \$25.00 toward the entertainment of the members of the American Gynecological and Obstetrical Association at the smoker which was held at the Hollenden on Tuesday evening, September 17.

Presentation of cases followed.

Dr. Aldrich: The case which I wish to present to the Society this evening is one of much interest. The history of the man I will give shortly, and will present it in a way that may appear a little odd. J. S., male, white, aged 42, came into my office yesterday afternoon for the first time; has a healthy wife and five healthy children; his youngest child will be six in June; his mother died at the age of seventy-four, father at the age of seventy-six; brother and sisters all living but one who died of pneumonia. The patient's only illnesses have been typhoid fever complicated with malaria some nine years ago and the usual diseases of childhood. His wife lost two children in infancy, both dying of summer complaint. She had one stillborn child and one miscarriage, but gives no reason for them. The patient states that his present ailment began with a feeling of great tiredness, followed by sudden pains above and below the knees and about the hips, also a great deal of pain in the loins, sharp, shooting, darting. After these began he failed greatly and rapidly.

He experienced no soreness following these attacks of pain, not even in places where the pain was most severe. There has been no trouble with the sphincters and no loss of sexual power. He is still able to estimate distances as well as ever and has no trouble to work at his trade as a blacksmith except his inability to stand. Now as he walks across the room and back, study his gait carefully. I think you will all agree with me in calling that a typical tabetic gait, and yet there is something about it that is

peculiar. The way in which he places his foot upon the ground is like a typical locomotor ataxia, but he walks with a very wide base. Now as he puts his feet together and shuts his eyes you see he sways and would fall immediately if he did not open his eyes and step forward. So you see we have a typical ataxia, a distinct Rhomberg, and a more or less true gait of a tabetic. Also the history of fulgurating pains is in favor of the diagnosis of a posterior spinal sclerosis. On the other hand, there is no history of trouble with bladder or failure of sexual power notwithstanding that three years have gone by since he has walked in this manner. You notice also that he has a rather active knee-jerk for a man who has so marked an ataxia. Now in a sitting posture you notice that you have to work a little bit with his ankle clonus before you can get it started. His ankle clonus and thigh clonus are not easily demonstrated because he unconsciously maintains considerable rigidity of the members. Now one thing more I wish to show you. You know that in locomotor ataxia we have a relaxation of the hamstring muscles, which Frankel called hypotonia, a condition in which a man can be doubled up with the legs straight out and the knees not bent at all. Now when I double him up in this manner, he tells me that it feels good. While he is lying down we will try to get the ankle clonus. Sometimes it is a very capricious thing and hard to get. There! Now you see that involuntarily he has furnished us with the best example of spasticity of his muscles that we could well have. Now we will blind his eyes and while I hold his leg at this angle, we will ask him where it is. He tells us that it is nearly level, whereas it is well-flexed. Now with his limb straight, he says that it is bent. Thus you see that he is unable to tell the position of the limb without the aid of sight, showing that he has no proper sense of position. Now you notice that we have hypotonia, loss of sense-of-position, a typical tabetic gait, and the history of fulgurant pains; but when we come to examine the pupils, they react promptly to light, and we find an increased knee-jerk, a spastic condition of his muscles, also a history of retention of sphincter power.

Now this case is a very good illustration of the fact that we cannot study disease by type. If we attempt to study a disease like this by type we shall almost invariably fall into error and fail to make a diagnosis, but when we come to study its various manifestations in relation to physiology, anatomy and pathology, it becomes plain. All of his spastic symptoms, and absence of a complete picture of tabes is due to an involvement of the lateral

columns of the cord and a limited amount of sclerosis of the posterior columns. This is a case of so-called ataxic paraplegia or spastic tabes. Better named postero-lateral sclerosis, a combined sclerosis of the cord.

I forgot to call your attention to some other symptoms. If I press on his ulnar nerve, he complains of pain. Putnam has called attention to this lack of neural sensitiveness in posterior spinal sclerosis and I regard it of value as a diagnostic of that affection. And if you pinch the testicle, he has the same sensation that a well person would have under the same circumstances. Testicular anesthesia is very common in tabes. Now I have shown this case to illustrate the fact, as has happened, that different physicians might make examinations and be entirely deceived as to the real trouble. The man who diagnosed this condition as a spastic paralysis was right, and the man who said it was a posterior sclerosis was also right. To make this more paradoxical we can with equal truth state that they were both wrong.

I have but one word to say in addition, and that is that these combined scleroses very rarely have syphilis as a cause. There is no history of anything of the kind in this case. It is a remarkable fact that syphilis as a cause of lateral sclerosis is as rare as a case of true tabes without syphilis.

Discussion of Dr. Tuckerman; remarks:

The cases which the Doctor related are very interesting and illustrate the fact that the upper instead of the lower segments of the spinal cord may be the seat of posterior sclerosis. These cases of tabes which develop in the upper segments are very rare; on the other hand, those beginning with an early affection of the eyes are not so uncommon and often exist for some years before the loss of the use of the legs occurs.

The future course of the case is of interest, the symptoms of posterior sclerosis will be finally swallowed up by the spastic symptoms and the case will progress until a typical picture of a true spastic paraplegia obtains.

Dr. Tuckerman: This case of Dr. Aldrich's presents a very great deal of interest in view of the fact that it is atypical, and I have risen to call attention to a case I saw at St. Alexis Hospital while I was in service there. The patient had been sent in for obstinate vomiting. Examination did not show anything particular to account for it; she was better by spells, but there was a distinct Argyle-Robertson pupil, and after studying the case carefully we came to the conclusion that it was an atypical locomotor

ataxia with the ataxic symptoms confined chiefly to the eye. She had fulgurant pains, but with marked exaggeration of knee reflexes. A second case which I recall came from the country, complaining of stomach trouble largely, with Argyle-Robertson pupil well-marked and a certain amount of ataxia with exaggerated knee reflexes.

Following came the regular program of the evening.

Obstruction of the Bowel.....Dr. F. E. Bunts.

Some Suggestions on the Treatment of Typhoid Fever....

.....Dr. H. B. Herrick.

Impressions of the Surgical and Obstetrical Clinics of Vi-

ennaDr. R. E. Skeel.

Pyelitis, Dilatation of Both Ureters, Disorganization of Both

Kidneys from Congenital Stricture of the Urethra....

.....Dr. L. B. Tuckerman.

Dr. Tuckerman: During the time when I was a medical student, Professor Fessenden N. Otis was having a very virulent discussion with the profession upon the question as to whether stricture was always a result of a venereal disease or a gonorrhea. It was contended by the powers that were, that stricture was always the result of a gonorrhea. Otis contended that it was more often congenital, and that a person with stricture who caught a gonorrhea could not be cured until the stricture was removed. I believe it is now pretty generally acknowledge that Otis was right, at least in the larger number of cases. This case which I now report is illustrative of the fact that congenital stricture of the urethra is not confined to the male alone.

Discussion upon Dr. Tuckerman's paper.

Dr. Bunts: I would like to ask the President what the anatomical facts are in these cases—where there are normal points of constriction.

Dr. Hamann: One can hardly say that there are "normal points of constriction" in these cases. All one could say is that there are variable calibres, points of narrowing and constriction, such as one might expect in any lumen. I think the facts as stated by Otis are very greatly exaggerated, but he certainly did show that the urethra is variable in calibre and where there is no specific disease to account for it.

Dr. Tuckerman: A man who makes a discovery which is contrary to the preconceived notions held by his fellows has to make his statements a little bit exaggerated in order to make an impression upon the profession to cause the facts to be sufficiently

noted to leave a residuum of truth. Where we have a urethra of this kind with inability to empty the bladder, I think it is good practice to find out whether we have not a constricting band obstructing its calibre.

The Society adjourned.

Notes and Comments.

Dr. B. O. Coates was confined to his home for a couple of weeks in November with an attack of pleurisy.

Dr. John N. Lenker, after a sickness of several weeks, is again able to be in his office.

Dr. E. W. Woodford, 737 Detroit street, was married to Miss Lottie Abbott, Westfield, Wis., on 21st November.

Dr. H. G. Sherman is confined to his home at Painesville with a mild attack of pneumonia. He expects to be in his office again about the 9th December.

Dr. George W. Crile, Cleveland, has been awarded the Alvarenga prize for 1901, for his essay on "An Experimental and Clinical Research into Certain Problems Relating to Surgical Operations."

Dr. Conn R. Ohliger, a graduate from C. C. P. & S., '98, who went to the Philippines as a contract surgeon, was drowned on 20th August. Dr. Ohliger was with Co. L, First U. S. infantry.

Dr. J. M. Ingersoll, whose office was at 50 Euclid avenue, suffered some loss from the fire in that building on 12th November. The Doctor is now located at Room 445, The Arcade, until the damaged building is repaired.

Dr. A. P. Ohlmacher, of Ohio Hospital for Epileptics, has been appointed Professor of Pathology in Northwestern University Medical School, Chicago. Dr. Theodore L. Chadbourne, assistant physician, was promoted to the position of resident pathologist.

The Lorain Co. Medical Society met at Amherst on November 12. Dr. F. Young, Lorain, read a paper on "Opium Poisoning." Dr. H. W. Powers, Amherst, read a paper entitled "Some Things That Have Helped Me in My Practice." He dealt with the therapeutic action of a number of drugs. The next meeting will be held at Lorain, December 10, 1901.

A physician going abroad wishes to dispose of his practice in this city. Address "Physician," in care of CLEVELAND MEDICAL GAZETTE.

Anti-Mosquito Ordinance Defeated.—Councilman Brown's ordinance appropriating \$15,000 for the destruction of mosquitoes was defeated in the Baltimore city council.—*A. M. A.*

A physician residing about thirty miles from Cleveland wishes to dispose of his practice. Trolley connections. Address "Physician No. 2," in care of CLEVELAND MEDICAL GAZETTE.

Parke, Davis & Co., wish us to announce to our readers, on the faith of their positive assurance, that not one of the recent tetanus fatalities following vaccination at Camden, Atlantic City, Bristol, Brooklyn, Cleveland, and St. John, N. B., succeeded the employment of their vaccine virus.

Test of Koch's Theory.—Interesting experiments of much importance are being made at the bacteriological laboratory of the New York Board of Health. They are being held to test Prof. Koch's theory that human tubercle bacilli will not readily infect cows or calves. So far the experiments have shown the theory to be correct, it is said. All the calves reacted to a tuberculin test, but the reaction was very slight, and may have been due to inflammation or other causes considered by the investigators at the laboratory to be of minor importance.—*A. M. A.*

Mosquitoes Attracted by Sound. Major Ronald Ross writes to the *British Medical Journal* that he has recently received a communication from Mr. Brennan of the Public Works Department, Jamaica, containing the following observation: "You will pardon me for drawing your attention to the fact, if you have not already noticed it, that the mosquitoes (I do not know if every variety) will respond to such sounds as a continuous whoop or hum. I have tried the experience lately, and find swarms gather round my head when I make a continuous whoop. There may be, however, some particular note or pitch that would be more attractive to them." This would afford an interesting subject for investigation, the journal quoted remarks, on the lines of Dr. Nuttall's recent research on the colors attractive to mosquitoes.

An Interesting Bacteriological Exhibit.—Dr. Charles Denison (*Journal of the American Medical Association*), in his Impressions of the London Tuberculosis Congress, etc., says: "In the bacteriological department were remarkable illustrations,

through the cultures on exhibition, of all kinds of tuberculosis. There was the 435th culture (in five tubes) of Koch's original discovery of the bacillus tuberculosis, first isolated by him on August 15, 1881. These cultures had been carried down through these twenty years and kept continually growing from the original seed. There were three very interesting test-tube cultures, first showing the normal state of the germ for comparison, second a sub-culture made after exposure to liquid air for forty-two days without contact, third a sub-culture after similar exposure with contact—all showing that the bacillus grows as vigorously as ever after exposure for forty-two days to 186 deg. F. below zero.—*N. Y. Med. Jour.*

The initial lecture of the series of lectures given under the auspices of the Y. M. C. A. of the Cleveland College of Physicians and Surgeons, was delivered on Wednesday evening, November 6, by Dean Parker, on the subject, "Old Mexico as a Health Resort." A good sized and appreciative audience listened attentively for almost two hours to the Doctor's graphic description of the country relative to altitude and healthfulness in the different localities, climate, rainy season and dry season, manners, customs and quaint costumes, the food and drinks and their preparation, of these strange southern people. He also gave a very interesting description of the sacrificial rites of the ancient Aztecs and of the cruel "bull fights," a custom which they have repeatedly tried to eliminate, but with no success. He thinks it a wierd, strange, interesting place for a sojourn while the storms are raging here in our northern climate. As a place for young physicians for a remunerative practice, he thinks it inadvisable to settle there, unless it be in the interest of some mining company.

This course is planned as a source of instruction and pleasant recreation to the students, and will, no doubt, interest the many friends of the institution.

Relation of Taxation to Tuberculosis. A French physician has in a recent paper traced a direct connection between taxation and tuberculosis. He finds that the mortality from this cause is very much higher in France than in England, in spite of the climatic disadvantages of the latter country, which with its damper and foggier seasons might be supposed to favor the disease. He accounts for the difference by the better nourishment of the Englishman. The Frenchman is handicapped by excessive taxation, which makes the cost of living high and restricts the poor to bad and insufficient food. In Paris the matter is made worse by the

"octroi" laws which make living there much more costly than in its immediate suburbs. All this is due to the costly militarism of continental European states; it is a penalty they pay for distrusting and hating each other. When Great Britain in the early part of the last century suffered similarly from unwise and excessive taxation, with its corn laws and its window tax shutting out light and ventilation, its mortality was also high, and the improvement in public health has followed tax reform. While we can not get our statesmen to study medical and sanitary matters we should as a profession see that they do not sin ignorantly in these ways. There is hardly a question that arises in government or politics that has not a possible medical bearing or on which medical science can not



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throw some light. What we pay for lack of this can not be told, but it is surely often a heavy price and may entail disaster. Public medicine in this wider sense in its relations to economics, legislation, and the like, is a field that is well worth cultivation. At present its importance is too little appreciated by our lawmakers and it is our duty as a profession to do what is in our power to enlighten them.—*A. M. A.*

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At the banquet given to Dr. Nathan Smith Davis by the members of the Chicago Medical Society, Dr. Robert H. Babcock responded to the last toast, "The Physician in Public Affairs." After referring to the good work that had been done by Dr. Davis in public affairs, he concluded by saying: "As an alumnus of the old Chicago Medical College, I call on you to rise, and, in that beverage which Dr. Davis loves and has continued to pledge his life, drink to his health."

At this juncture the entire audience arose, put the glasses to their lips, and, after the following sentiment expressed by Dr. Davis, drank to his health: "Here is to pure water, Nature's universal aseptic; it muddles no brain; it begets no anarchy; it sparkles on the dew-drop; it gives peace to the nation; it flows in the river of life, and it flows by the throne of God. Let us take it, not only as guests here, but for the whole profession of America."—*A. M. A.*

The Anarchist.—The great questions of capital and labor, and the social problems of the day are being discussed from two entirely different standpoints. One, from that of law and order by philanthropists with cultured minds and a certain amount of logic, would reach the desired results and bring about the millennium of justice and equality by educating the masses up to what they consider a correct idea of human rights and liberty; the other, with a brain so constructed as to designate an ideal typical criminal outside of any touch of humanity, is of that class clearly outlined by Lombrosi and the other great Italian criminologists as not insane, but criminal in all their instincts. Of this type was the assassin of the President. As a boy he was regarded as an incarnate devil upon whom the punishment to which he was frequently subjected by his parents produced no effect. His father predicted that if he did not mend his ways he would be hung. He was cruel, and delighted in torturing the animals on his father's farm. By the neighbors he was looked upon as a pervert with no sense of right or wrong, and like most of his class was an arrant coward. His great vanity with the idea that his act would attract the attention of the world alone sustained him after his condemnation, but even that failed before the execution.—*Med. Times.*

The Use of Insects as Food.—M. Dagin, a French entomologist, has recently written an article in which he recommends certain insects as an article of diet. He speaks with authority, having not only read through the whole literature of insect-eating, but having himself tasted several hundreds of species raw, boiled,

fried, broiled, roasted, and hashed. He has even eaten spiders, but does not recommend them. Cockroaches, however, he says, form a most delicious soup. Pounded in a mortar, put through a sieve, and poured into water or beef stock, Dagin says they make a puree preferable to bisque. Wilfred de Fonvielle, the French scientist, prefers cockroaches in the larval state. The perfect insect may be shelled and eaten like a shrimp. Then, caterpillars are a light food and easy of digestion; not only African and American natives like them, but they are also appreciated by Frenchmen. M. de Lalande, the astronomer, dined every Sunday with the zoologist Quatremere d'Isjonvalle, and Mme. d'Isjonvalle used to collect caterpillars and serve them to the guest. The locust is much eaten by the Bedouins, and may be enjoyed fried, dried in the sun, ground into flour, boiled in milk, or fried and served with rice. The Jesuit father Cambon thinks the locust flour might become popular in Europe as a condiment. The precise opinions which are expressed by travelers as to locusts differ considerably, Amicis said that they taste like shrimps; Niebuhr, like sardines, and Livingstone, like caviare—another illustration of the differences of palatal appreciation.—*Medical Times and Hospital Gazette*.

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